# Wireless N 150 Green Router

## Model # AR570Wv2

## User's Manual

Ver. 1A

# Copyright

Copyright © Airlink101, 2012. The contents of this publication may not be reproduced in any part or as a whole, stored, transcribed in an information retrieval system, translated into any language, or transmitted in any form or by any means, mechanical, magnetic, electronic, optical, photocopying, manual, or otherwise, without the prior written permission.

# Trademarks

All products, company, brand names are trademarks or registered trademarks of their respective companies. They are used for identification purpose only. Specifications are subject to be changed without prior notice.

# FCC Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against radio interference in a commercial environment. This equipment can generate, use and radiate radio frequency energy and, if not installed and used in accordance with the instructions in this manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause interference, in which case the user, at his own expense, will be required to take whatever measures are necessary to correct the interference.

# Table of Contents

**CHAPTER 1 PRODUCT INFORMATION ..... 1**

1.1 INTRODUCTION AND SAFETY INFORMATION ..... 1

1.2 PACKAGE CONTENTS ..... 2

1.3 FAMILIAR WITH YOUR NEW GREEN ROUTER ..... 3

**CHAPTER 2 CONFIGURE THE ROUTER ..... 5**

2.1 CONNECT THE ROUTER TO YOUR NETWORK ..... 5

2.2 CONFIGURE THE ROUTER WITH EZ SETUP WIZARD ..... 7

2.3 CONFIGURE THE ROUTER WITH WEB CONFIGURATION UTILITY ..... 16

2.4 CONNECT TO ROUTER WIRELESSLY ..... 24

**CHAPTER 3 ADVANCED CONFIGURATION ..... 25**

3.1 BASIC SETTING ..... 27

*3.1.1 Primary Setup ..... 28*

*3.1.2 DHCP Server ..... 39*

*3.1.3 Wireless ..... 41*

*3.1.4 Change Password ..... 54*

3.2 FORWARDING RULES ..... 55

*3.2.1 Virtual Server ..... 55*

*3.2.2 Special Applications ..... 57*

*3.2.3 Miscellaneous ..... 58*

3.3 SECURITY SETTING ..... 60

*3.3.1 Packet Filters ..... 60*

*3.3.2 Domain Filters ..... 64*

*3.3.3 URL Blocking ..... 66*

*3.3.4 MAC Access Control ..... 67*

*3.3.5 Miscellaneous ..... 70*

3.4 ADVANCED SETTING ..... 72

*3.4.1 System Time ..... 73*

*3.4.2 System Log ..... 75*

*3.4.3 Dynamic DNS ..... 77*

*3.4.4 QoS Rule ..... 78*

*3.4.5 SNMP ..... 80*

*3.4.6 Routing ..... 81*

*3.4.7 Schedule Rule* ..... *84*
3.5 TOOLBOX ..... 86
*3.5.1 View Log* ..... *87*
*3.5.2 Firmware Upgrade* ..... *88*
*3.5.3 Backup Setting* ..... *89*
*3.5.4 Reset to Default* ..... *89*
*3.5.5 Reboot* ..... *90*
*3.5.6 Miscellaneous* ..... *90*
**CHAPTER 4 STATUS ..... 91**
4.1 SYSTEM STATUS ..... 92
4.2 WIRELESS STATUS ..... 92
4.3 STATISTICS INFORMATION ..... 92
4.4 NAT STATUS ..... 93
**CHAPTER 5 APPENDIX ..... 94**
5.1 HARDWARE SPECIFICATION ..... 94
**TECHNICAL SUPPORT ..... 95**

# Chapter 1 Product Information

## *1.1 Introduction and safety information*

Congratulations on your purchase of the Airlink101® AR570Wv2 Wireless N 150 Green Router. This Router is recommended to be used with AirLink101® Wireless N 150 products to provide the best performance. The high bandwidth combined with extended wireless coverage delivers fast and reliable connections for all of your networking applications.

The Green power-saving technology intelligently reduces power consumption when no network activity is detected. A full range of security features such as WEP, WPA-PSK, and WPA2-PSK provide the highest level of wireless network security. The bundled EZ Setup Wizard allows you to set up the router with an easy-to-use user interface. Best of all, AR570Wv2 works with all 802.11n / g / b network devices which ensures compatibility with the existing wireless products.

### *Other features of this router including:*

- High wireless data rate of up to 150Mbps* with IEEE802.11n standard
- Fully backward compatible with 802.11 b/g
- Advanced NAT+SPI firewall with DoS detection provides secure protection for your network
- Wirelessly connects up to another 4 AR570Wv2 routers with WDS (Wireless Distribution System) supported
- Establishes secure wireless connection via Easy Setup Button (WPS™ compatible)
- Green Ethernet Technology minimizes power consumption
- QoS (Quality of Service) designed for prioritizing multimedia data transmission (i.e. VoIP, online gaming or movie streaming, etc.)
- Supports WEP, WPA-PSK/WPA2-PSK wireless security
- EZ Setup Wizard guides you through the router installation quickly and easily
- Supports multiple sessions IPSec and PPTP VPN pass-through
- Works best with other Airlink101® Wireless N products

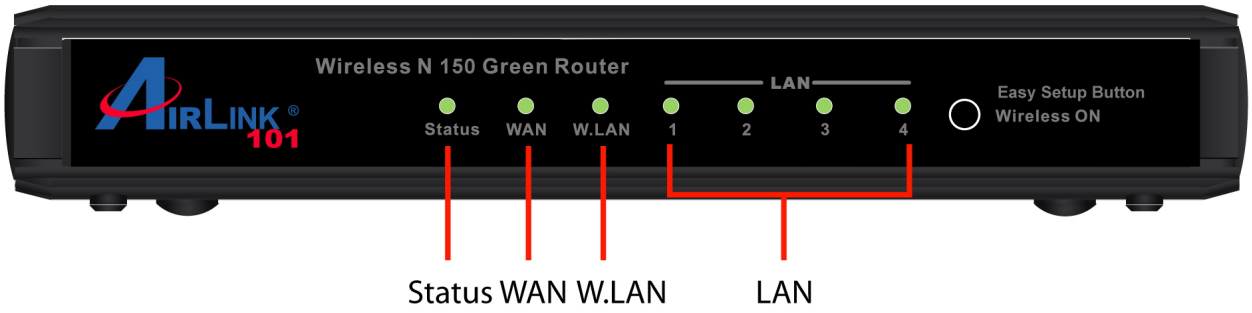
## *1.2 Package Contents*

Before you start using this router, please check if there is anything missing in the package, and contact your dealer of purchase to claim for missing items:

1. Wireless N 150 Green Router with one un-detachable Antenna
2. Power Adapter
3. Setup CD
4. Quick Installation Guide
5. Ethernet Cable

## *1.3 Familiar with your new Green Router*

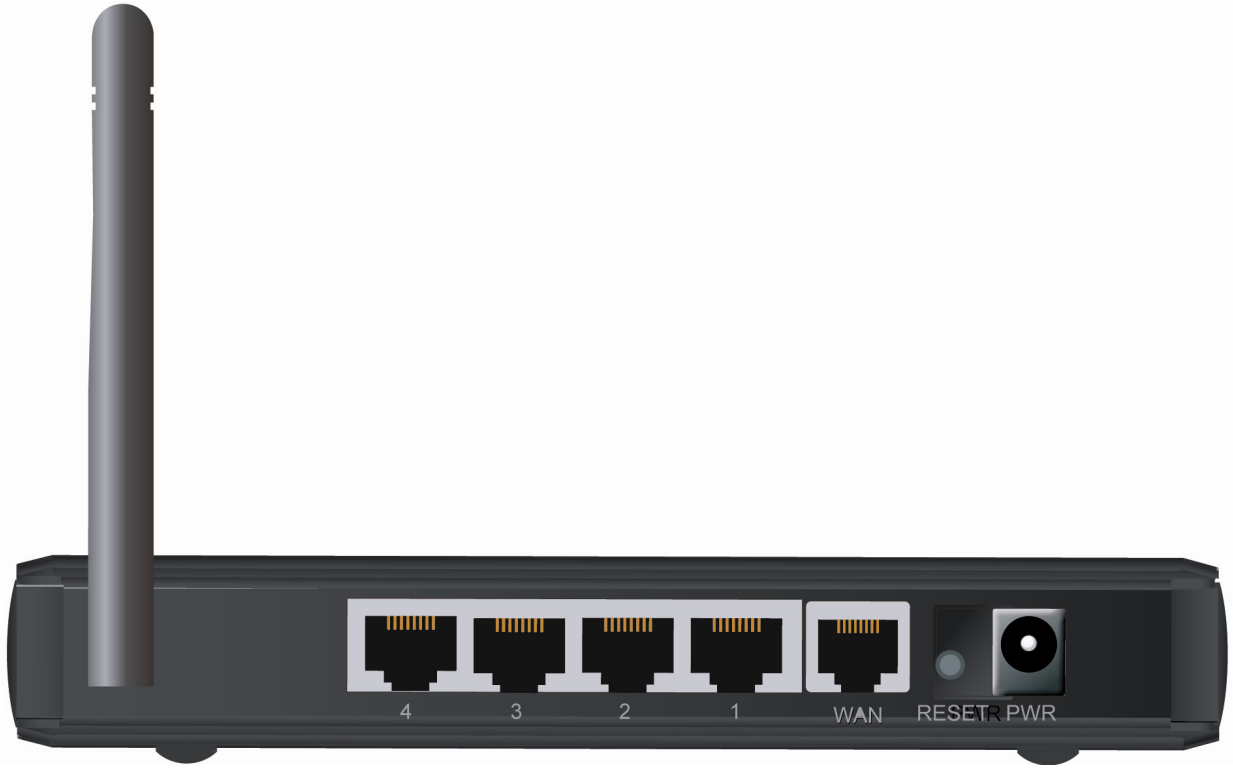
### A. Front Panel




| LED | Status | Description |
|---|---|---|
| Status | Blinking (Green) | Device is working properly. |
| WAN | On (Green) | Network device is connected |
| | Blinking | Data access |
| | Off | Not connected |
| LAN 1~4 | On (Green) | Network device is connected |
| | Blinking | Data access |
| | Off | Not connected |
| W.LAN | On (Green) | Wireless feature is on |
| | Blinking | Data access |
| | Blinking Rapidly | Device is in WPS™ PBC mode |
| | Off | Wireless feature is disabled |

| Button | Description |
|---|---|
| Easy Setup Button (WPS™ compatible) | When Wireless is ON, press this button and release it immediately to start security synchronization function (WPS™ compatible). |
| Wireless On | Press this button and hold it for about 1 sec. to turn on/off router's wireless radio. |

## B. Back Panel



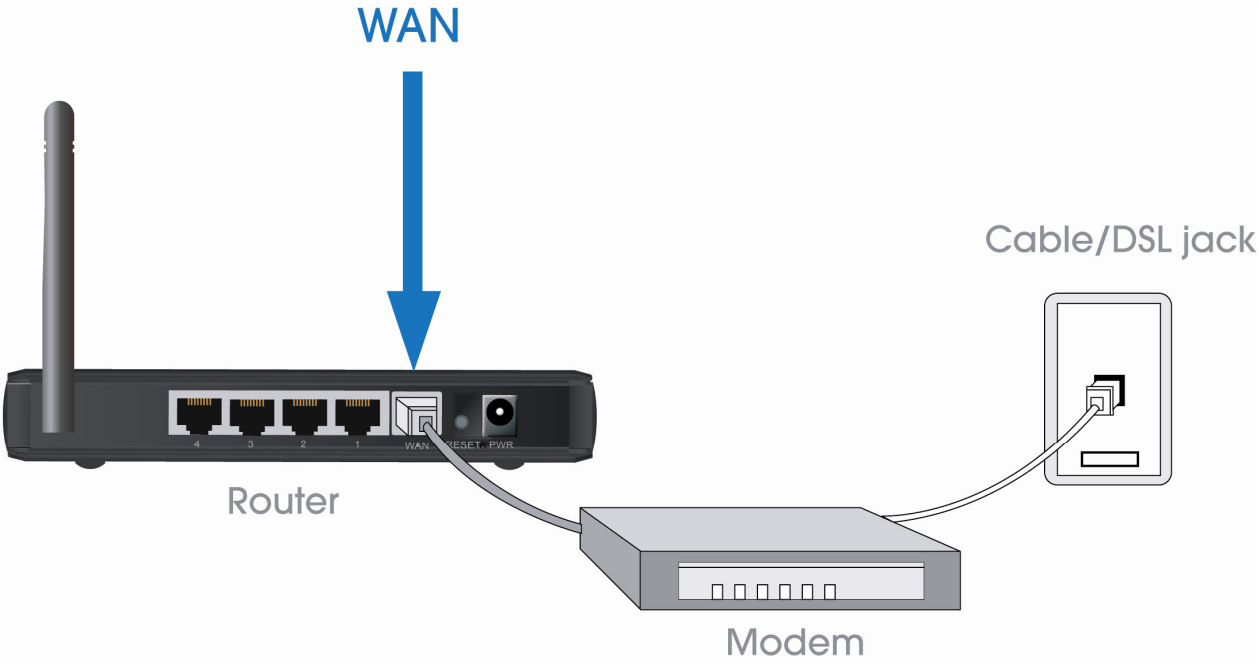

| Item Name | Description |
|---|---|
| Antennas | These antennas are un-detachable 1.8dBi dipole antennas. |
| 1 - 4 | Local Area Network (LAN) ports 1 to 4. |
| WAN | Wide Area Network (WAN / Internet) port. |
| RESET | Press this button and hold for 4 seconds to restore factory default settings. |
| PWR | Power connector, connects to A/C power adapter. |

# Chapter 2 Configure the Router

## *2.1 Connect the Router to your network*

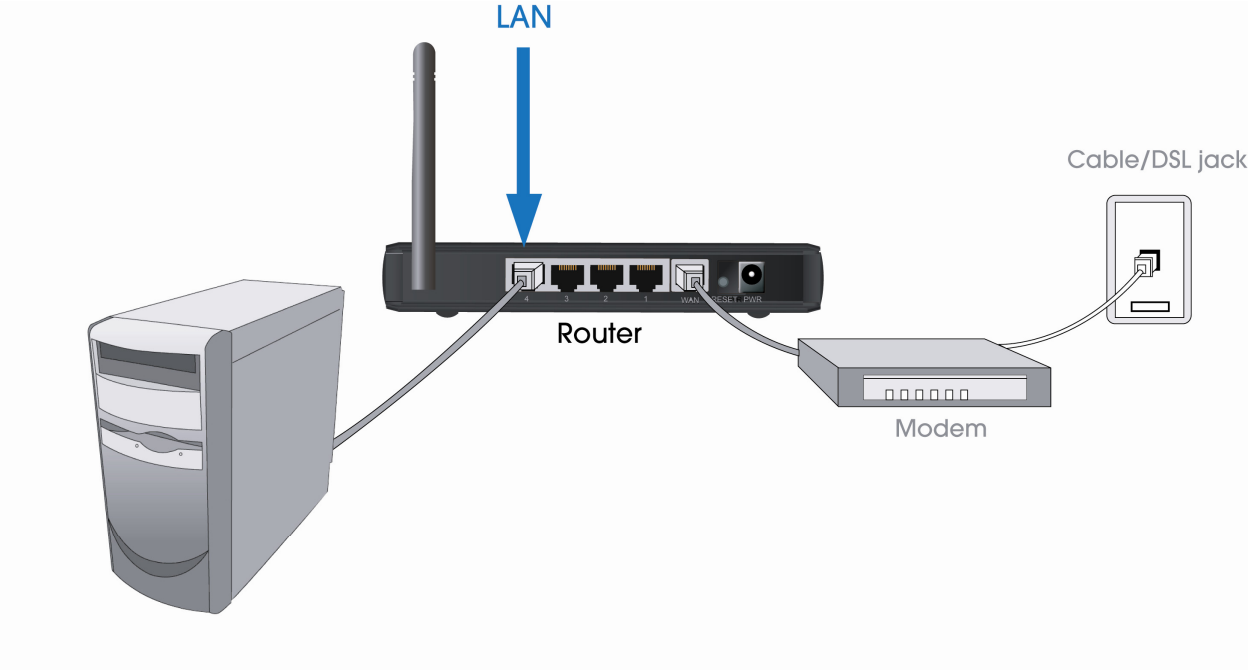
*Note: Prior to connecting the router, be sure to power off your computer, DSL/Cable modem, and the router.*

**Step 1** Connect one end of a network cable to the **WAN** port of the router and connect the other end of the cable to the DSL/Cable modem.

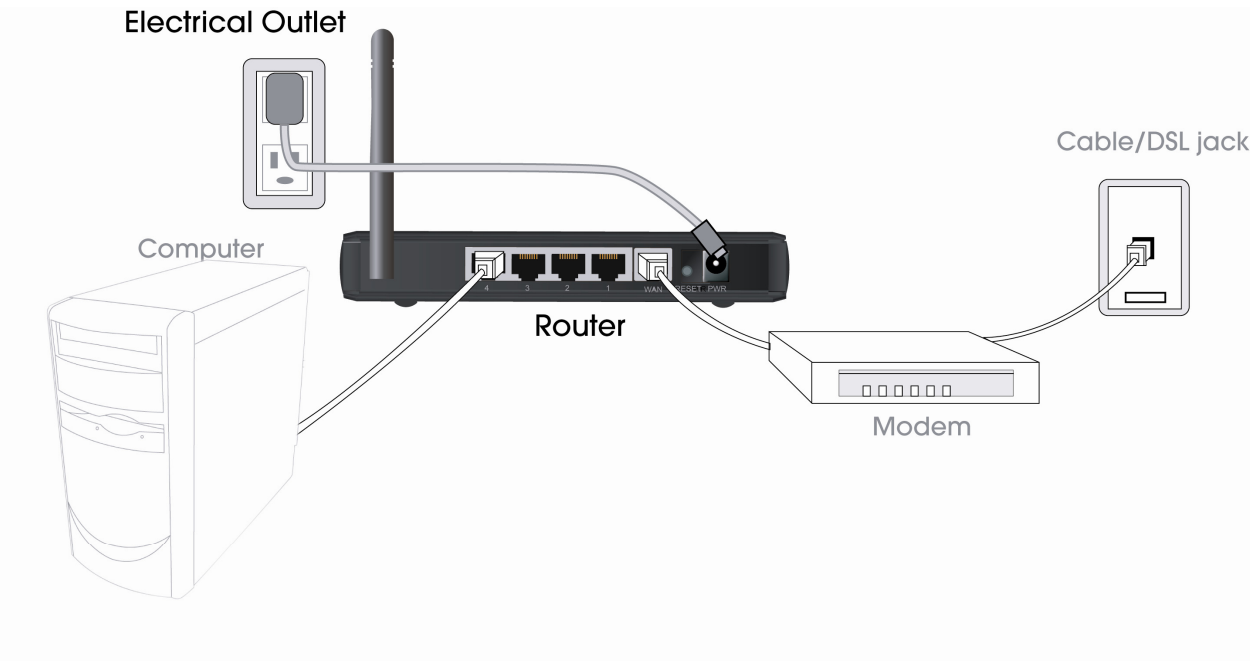



**Step 2** Power on the modem.

**Step 3** With another network cable, connect one end of the cable to your computer's **Ethernet** port and connect the other end to one of the **LAN** ports of the router, as shown in the following figure. (After setup finishes, you can remove the network cable between the computer and router if you want to connect them wirelessly.)




**Step 4** Plug the power adapter to the router and connect it to an electrical outlet.

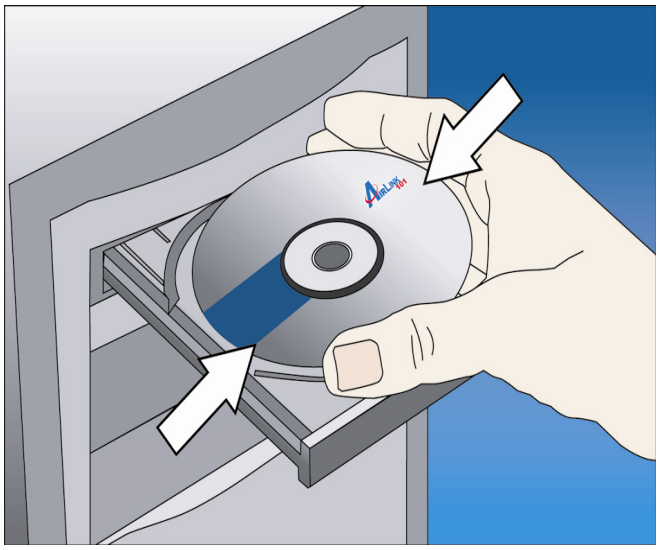



**Step 5** Power on your computer.

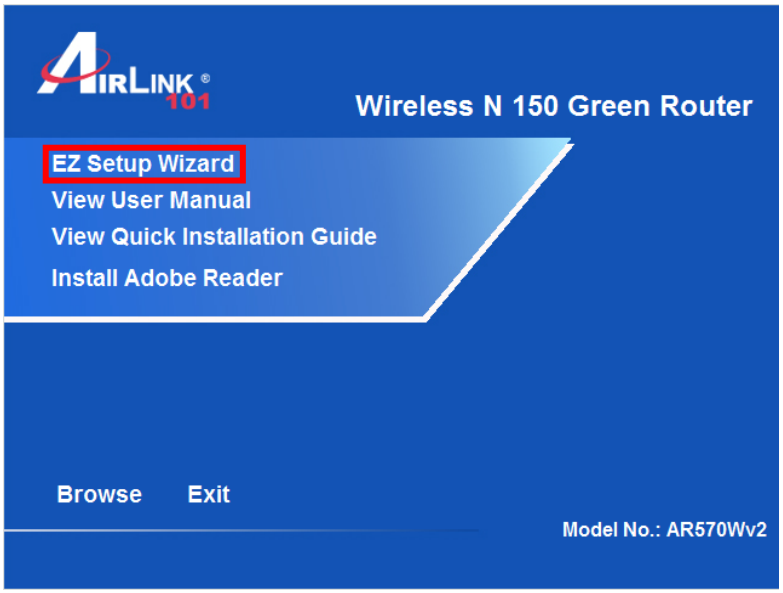
**Step 6** Check LEDs of the router: make sure **Status, WAN**, **W.LAN**, and the **LAN** port that the computer is connected to are ON.

## *2.2 Configure the Router with EZ Setup Wizard*

**Step 1** Insert the Setup CD into CD-ROM drive.

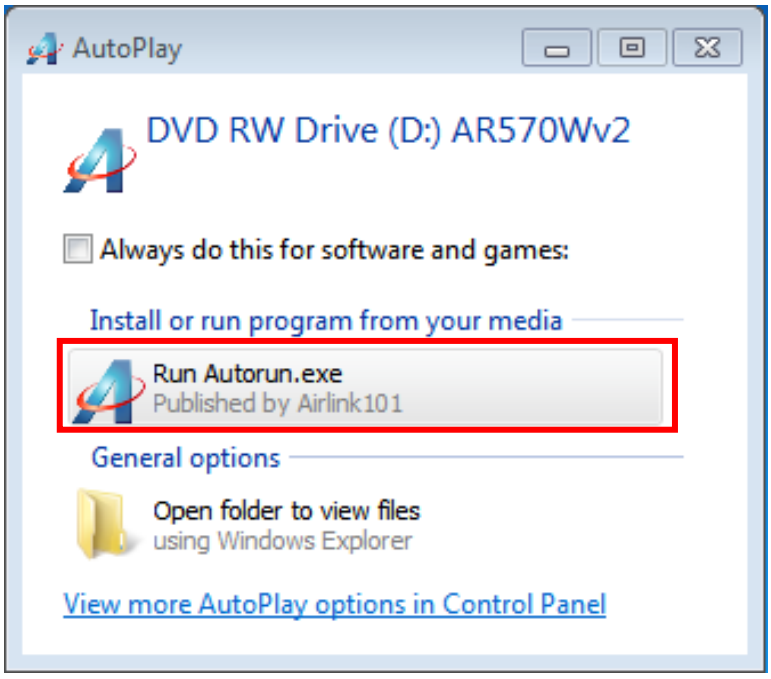


**Step 2** When the autorun menu pops up, click EZ Setup Wizard.

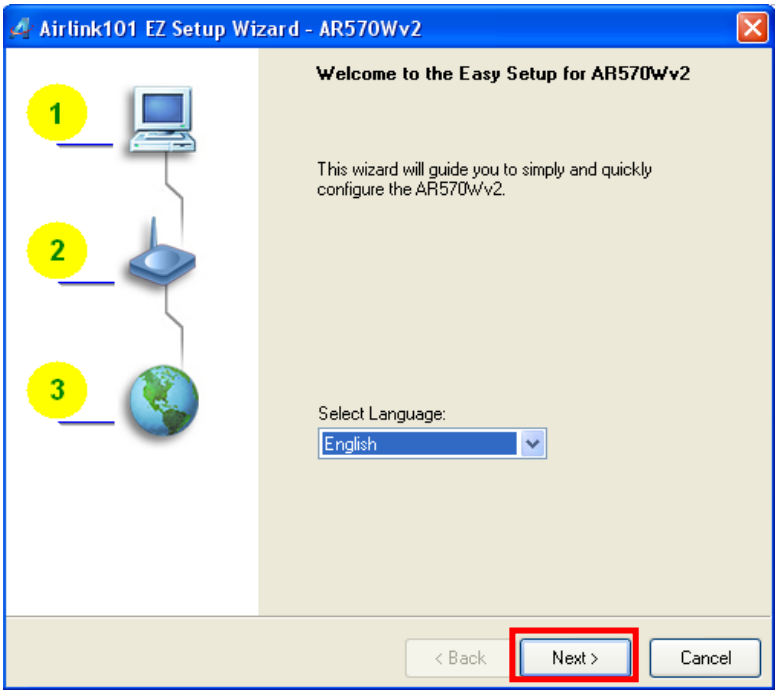



*Note: If the autorun menu does not show up on your monitor, please go to* ***Computer → CDROM drive → Wizard****, and execute "****EZWizard.exe****".*

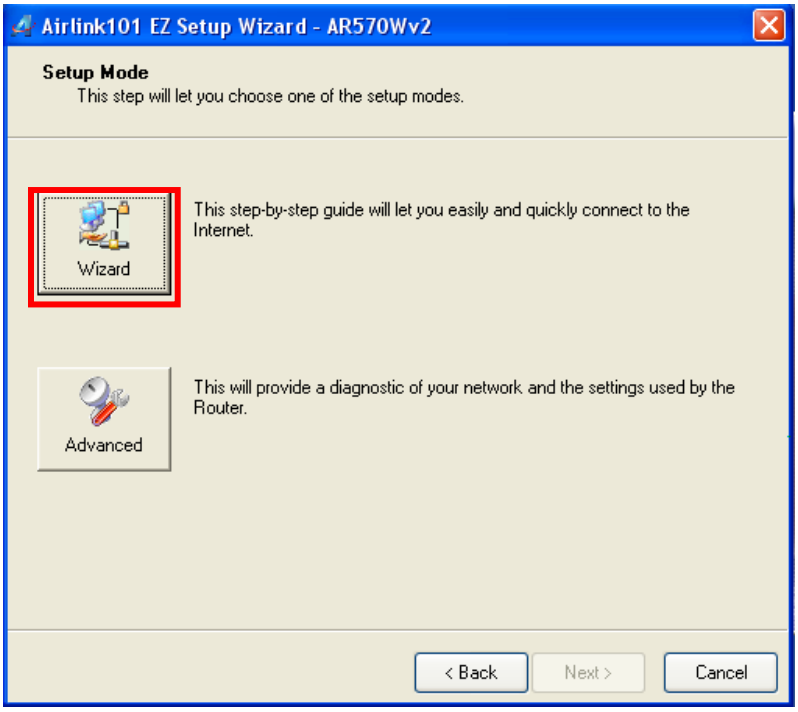
**Windows 7 and Vista users:** An AutoPlay window pops up on screen. Please make sure you give permission to run the setup program by clicking **Run Autorun.exe**.


AutoPlay
DVD RW Drive (D:) AR570Wv2
Always do this for software and games:
Install or run program from your media
Run Autorun.exe
Published by Airlink101
General options
Open folder to view files
using Windows Explorer
View more AutoPlay options in Control Panel

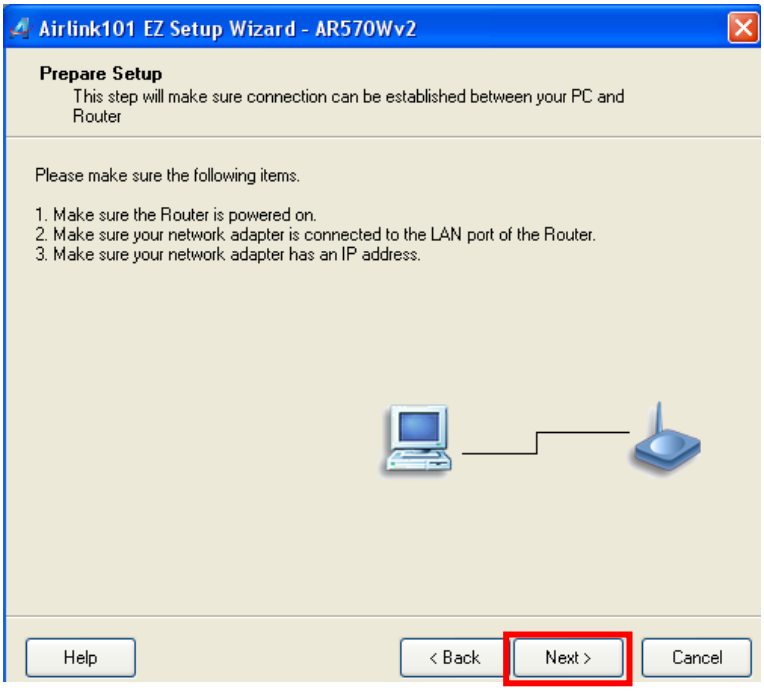
**Step 3** Select your language and click **Next**.


Airlink101 EZ Setup Wizard - AR570Wv2
Welcome to the Easy Setup for AR570Wv2
This wizard will guide you to simply and quickly configure the AR570Wv2.
Select Language:
English
< Back
Next >
Cancel

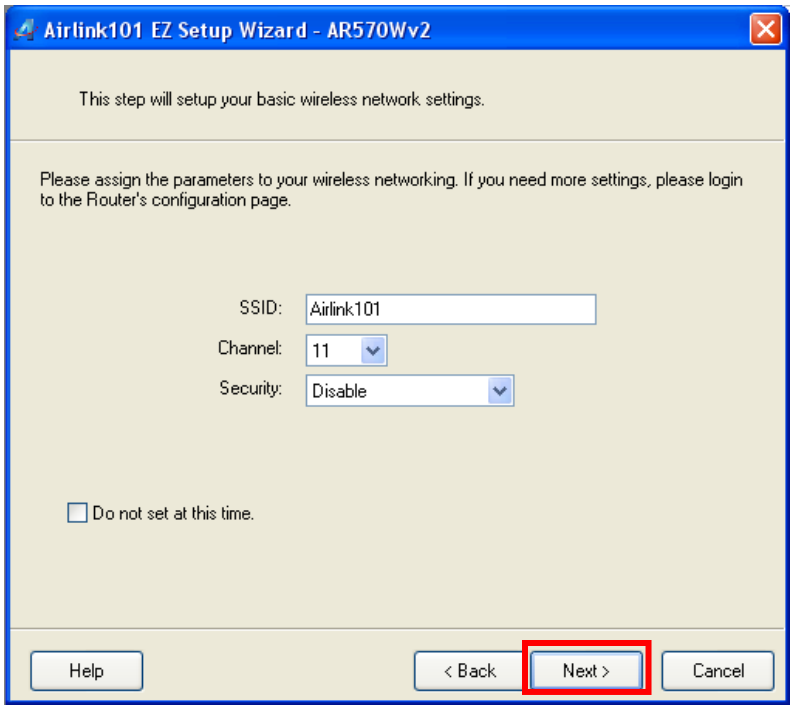
**Step 4** Click on **Wizard**.


Airlink101 EZ Setup Wizard - AR570Wv2
Setup Mode
This step will let you choose one of the setup modes.
Wizard
This step-by-step guide will let you easily and quickly connect to the Internet.
Advanced
This will provide a diagnostic of your network and the settings used by the Router.
< Back
Next >
Cancel

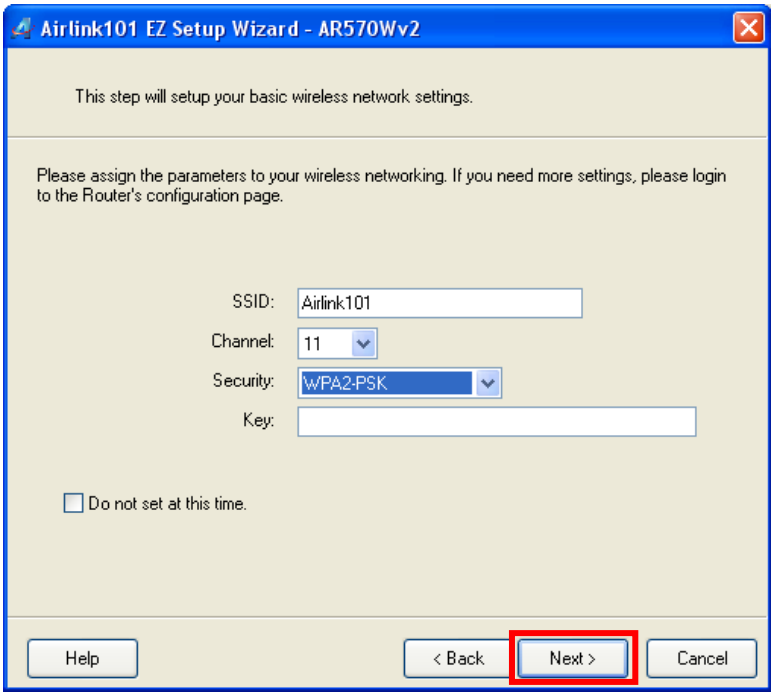
**Step 5** Please make sure your computer is connected to one of the 4 LAN ports of the router, and your modem is connected to the WAN port of the router.


Airlink101 EZ Setup Wizard - AR570Wv2
Prepare Setup
This step will make sure connection can be established between your PC and Router
Please make sure the following items.
1. Make sure the Router is powered on.
2. Make sure your network adapter is connected to the LAN port of the Router.
3. Make sure your network adapter has an IP address.
Help
< Back
Next >
Cancel

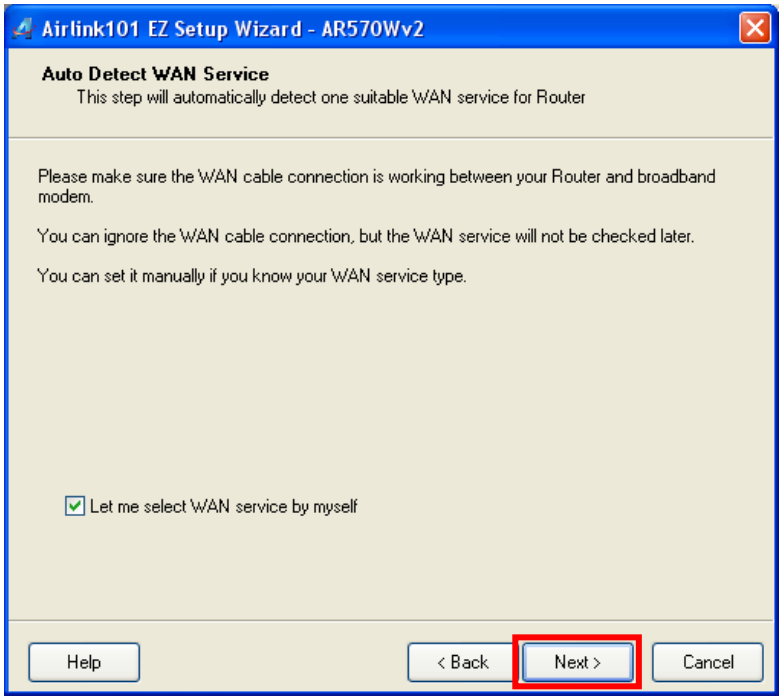
**Step 6** Click **Next** to configure the basic wireless settings. The default wireless encryption setting is disabled. It is suggested to select **WPA2-PSK** for best wireless security.


Airlink101 EZ Setup Wizard - AR570Wv2
This step will setup your basic wireless network settings.
Please assign the parameters to your wireless networking. If you need more settings, please login to the Router's configuration page.
SSID:
Airlink101
Channel:
11
Security:
Disable
Do not set at this time.
Help
< Back
Next >
Cancel

**Step 7** Configure the SSID (wireless network name, i.e. Airlink101), Channel, Security and Key. It is suggested to select **WPA2-PSK** for best wireless security. Enter 8~63 characters into Key box, then click **Next**.



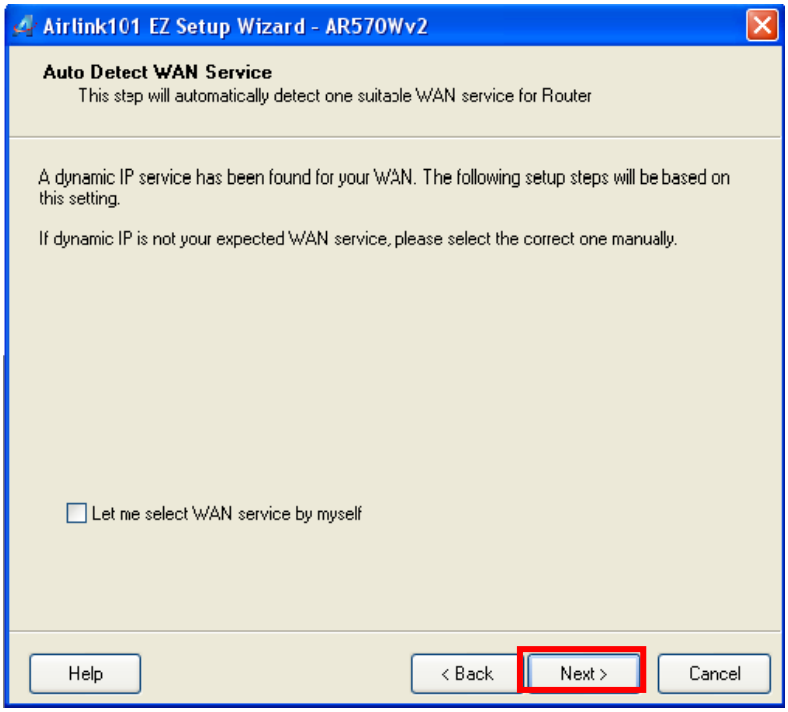
**Step 8** Click **Next** and the wizard will detect your WAN settings, or you can select your WAN type manually by checking “Let me select WAN service by myself”.


Airlink101 EZ Setup Wizard - AR570Wv2
Auto Detect WAN Service
This step will automatically detect one suitable WAN service for Router
Please make sure the WAN cable connection is working between your Router and broadband modem.
You can ignore the WAN cable connection, but the WAN service will not be checked later.
You can set it manually if you know your WAN service type.
Let me select WAN service by myself
Help
< Back
Next >
Cancel

**Step 9** Enter the settings based on your WAN service type.

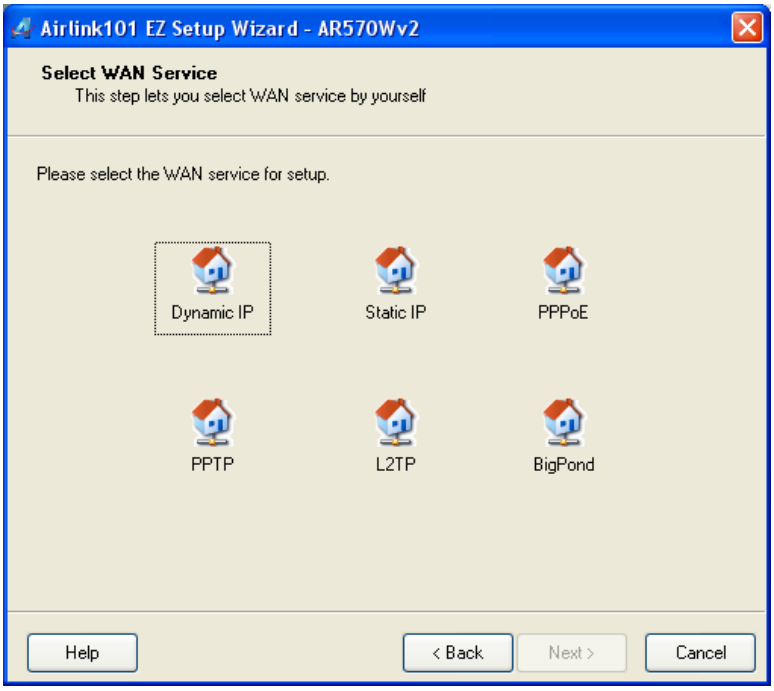
### *Cable (Dynamic IP)*

If you are using cable Internet service, your WAN type is “Dynamic IP”. You do not need to configure anything here, and then click **Next** to continue.

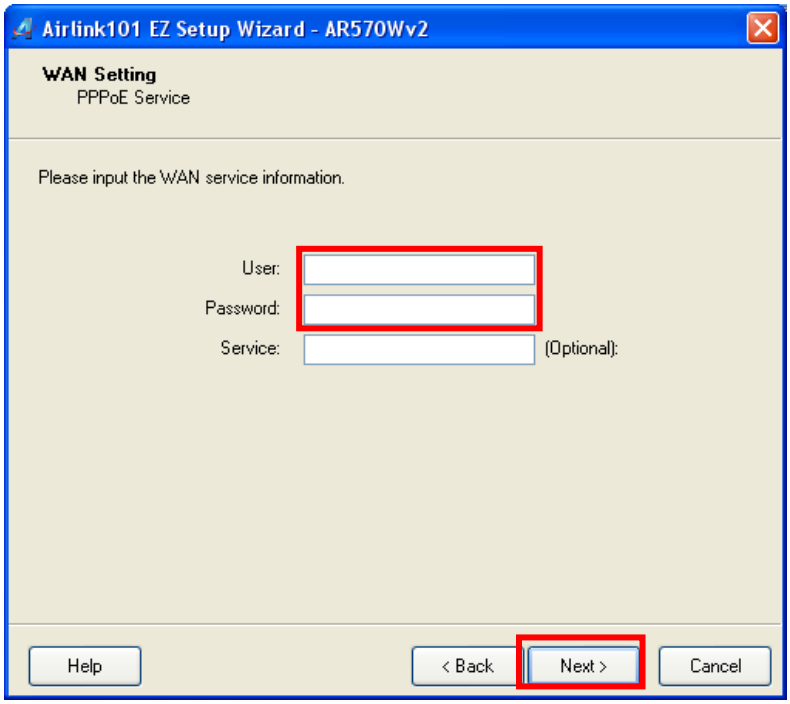

Airlink101 EZ Setup Wizard - AR570Wv2
Auto Detect WAN Service
This step will automatically detect one suitable WAN service for Router
A dynamic IP service has been found for your WAN. The following setup steps will be based on this setting.
If dynamic IP is not your expected WAN service, please select the correct one manually.
Let me select WAN service by myself
Help
< Back
Next >
Cancel

### *DSL (PPPoE or Dynamic IP)*

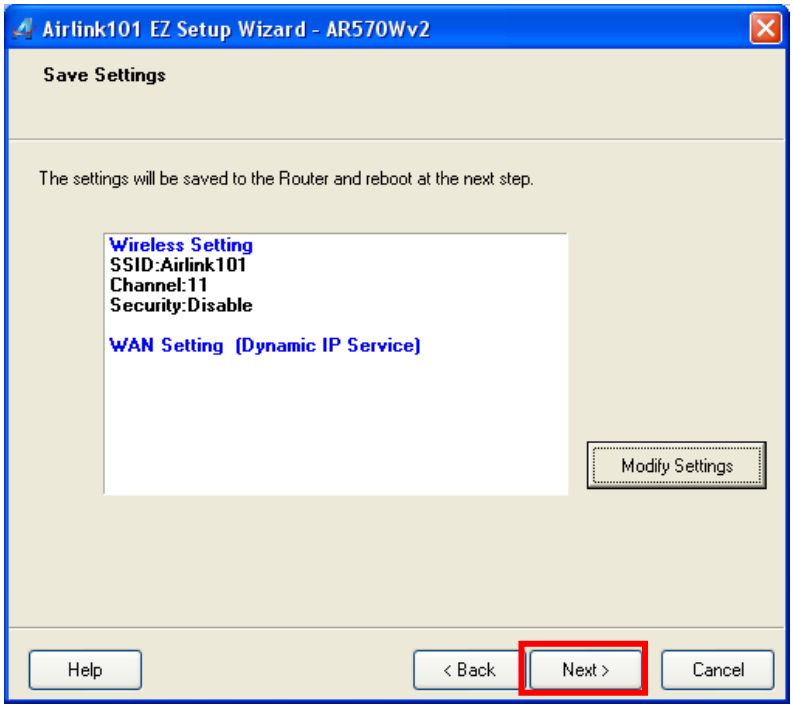
For DSL users, your WAN type is either PPPoE or Dynamic IP. You can try both types and determine which one works for you.



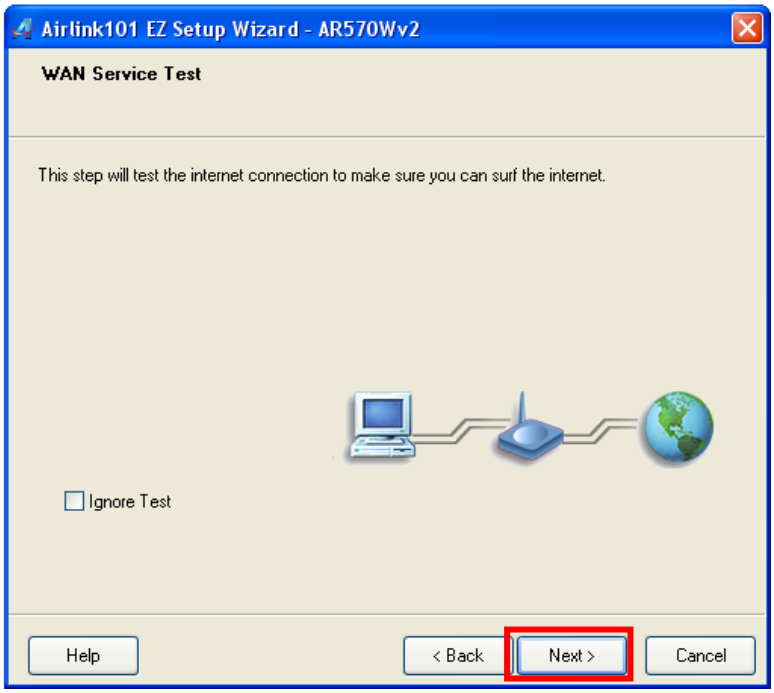
For PPPoE connection, please enter the user name and password provided by your ISP (Internet Service Provider). ***Note:*** *Depending on the ISP, you may need to include the domain name with your user name.* **Example: username@sbcglobal.net**



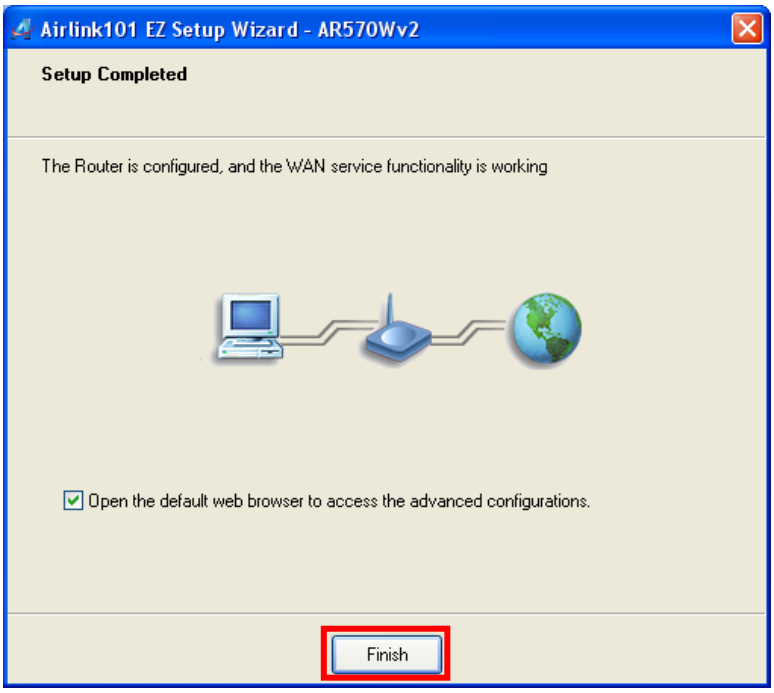

**Step 10** Verify the settings you have configured. Click **Next** to save the settings and reboot the router. This will take about 30 seconds.



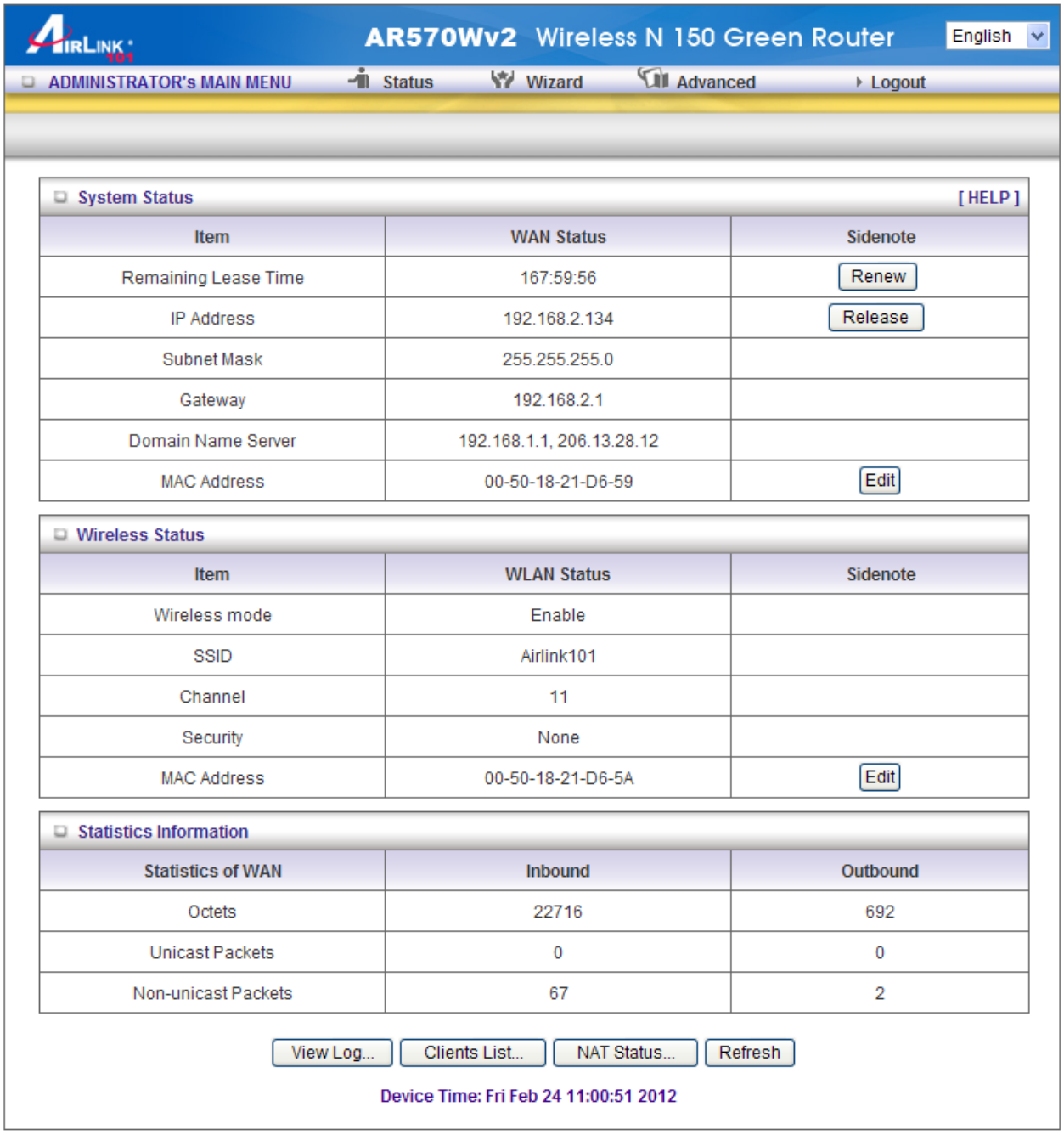
**Step 11** Click **Next** to test the Internet Connection, or you can ignore the test, just open the Internet browser and verify if your computer is connected to the Internet.


Airlink101 EZ Setup Wizard - AR570Wv2
WAN Service Test
This step will test the internet connection to make sure you can surf the internet.
Ignore Test
Help
< Back
Next >
Cancel

**Step 12** After the WAN service test is completed, click **Finish**. The wizard will open the web configuration page for the router automatically unless you uncheck “Open the default web browser to access the advanced configuration”.


Airlink101 EZ Setup Wizard - AR570Wv2
Setup Completed
The Router is configured, and the WAN service functionality is working
Open the default web browser to access the advanced configurations.
Finish

You will see the status of the router on the web configuration page brought up by the web browser. Valid numbers should be assigned to IP Address, Subnet Mask and Gateway, instead of all 0's.

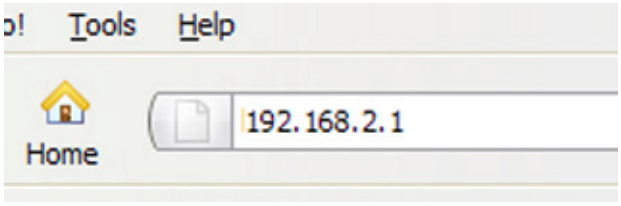


## *2.3 Configure the Router with Web Configuration Utility*

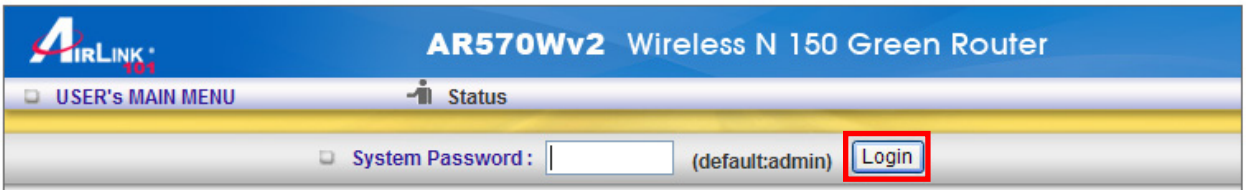
Another approach to configure the router is using the Wizard in the Web Configuration Utility. The wizard will guide you setting up the basic settings of this router. You do not need to go through the wizard again if you have finished *2.2 Configure the Router with EZ Setup Wizard.*

In order to enter the Web Configuration Utility, you need to log into the router from your web browser first. Please follow the below steps:

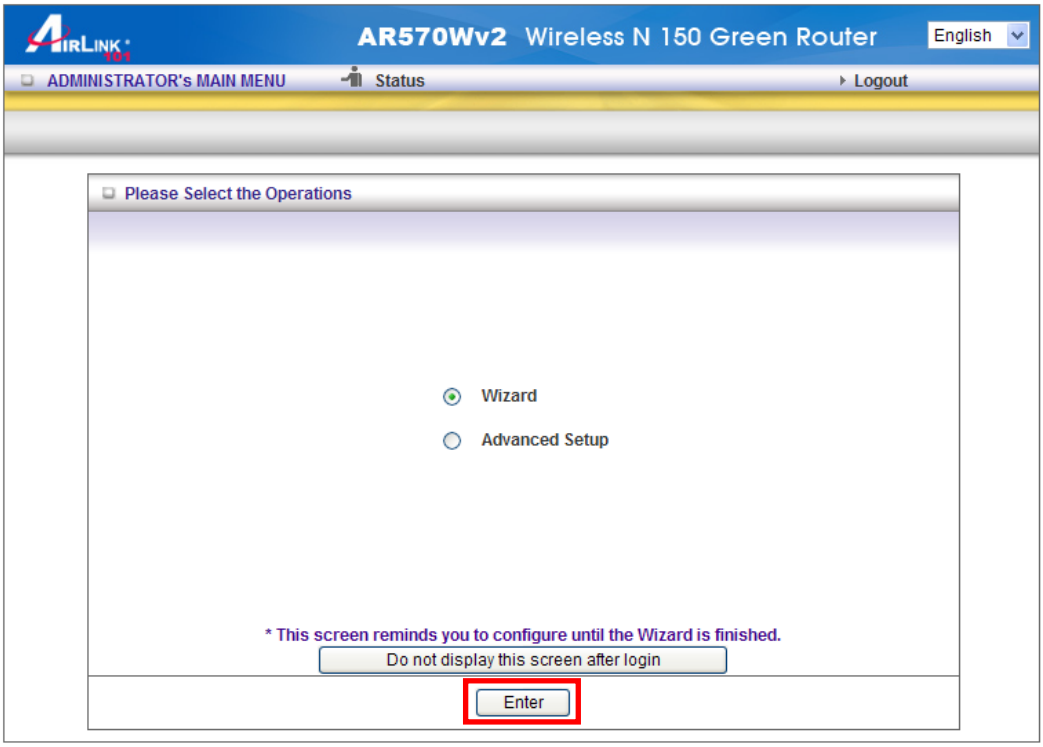
**Step 1** Open the web browser (i.e. Internet Explorer or Mozilla Firefox) of the computer connected to the router and type **192.168.2.1** or the IP address you assigned to this router in the address bar and press **Enter**.



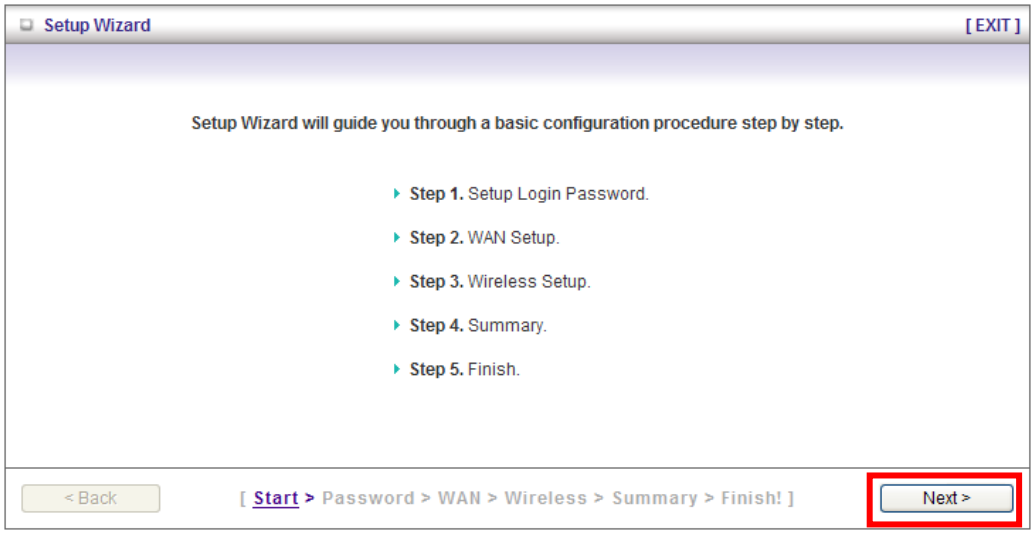

**Step 2** Enter the system password and click **Login**. (The default password is “admin”.)



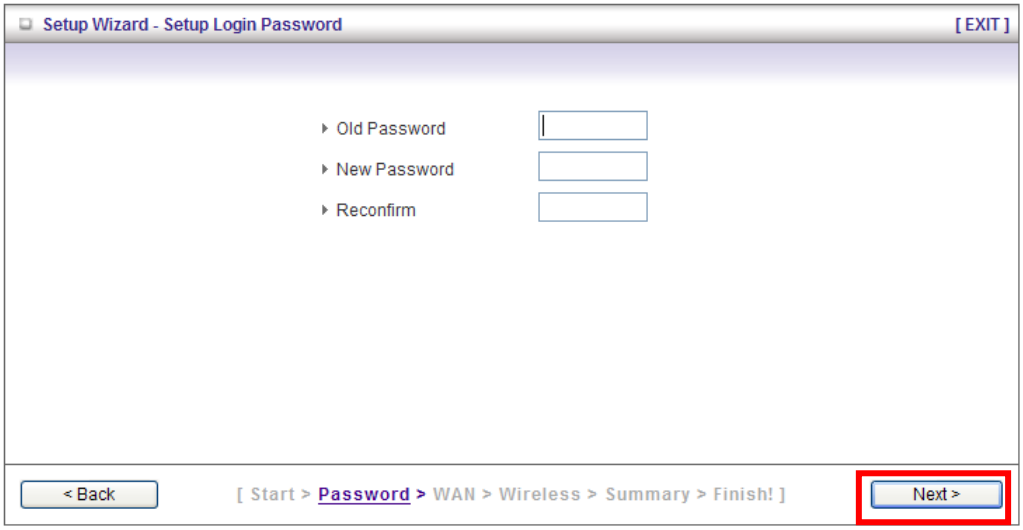
**Step 3** When you see this following page pops up, you have successfully logged into the router. Select **Wizard** and click on **Enter** to start the Setup Wizard.



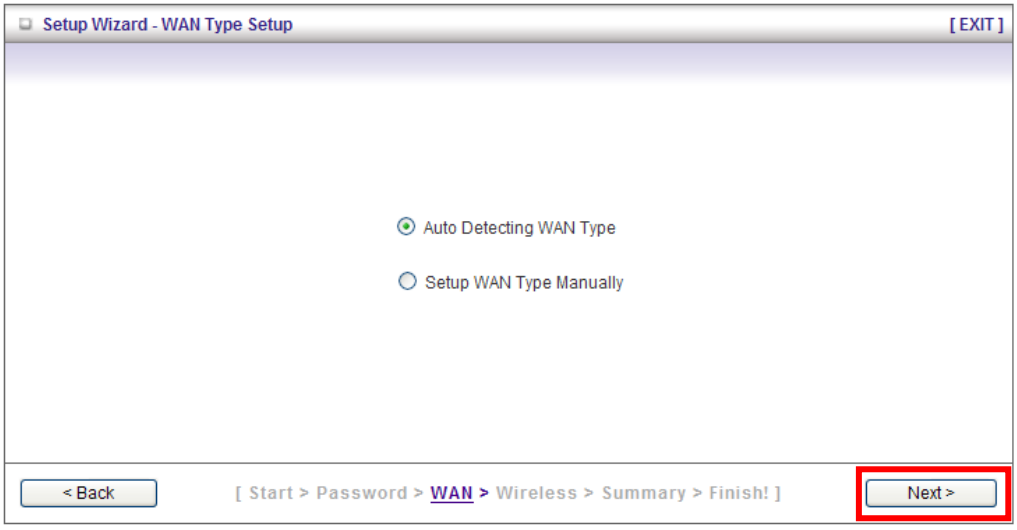

**Step 4** Click **Next** to start the Setup Wizard.


Setup Wizard
[ EXIT ]
Setup Wizard will guide you through a basic configuration procedure step by step.
Step 1. Setup Login Password.
Step 2. WAN Setup.
Step 3. Wireless Setup.
Step 4. Summary.
Step 5. Finish.
< Back
[ Start > Password > WAN > Wireless > Summary > Finish! ]
Next >

**Step 5** To change the System Password, enter the current password, new password and reconfirm the new password. (The default password is 'admin'.) If you do not wish to change the password, please leave all fields blank. Click **Next**.



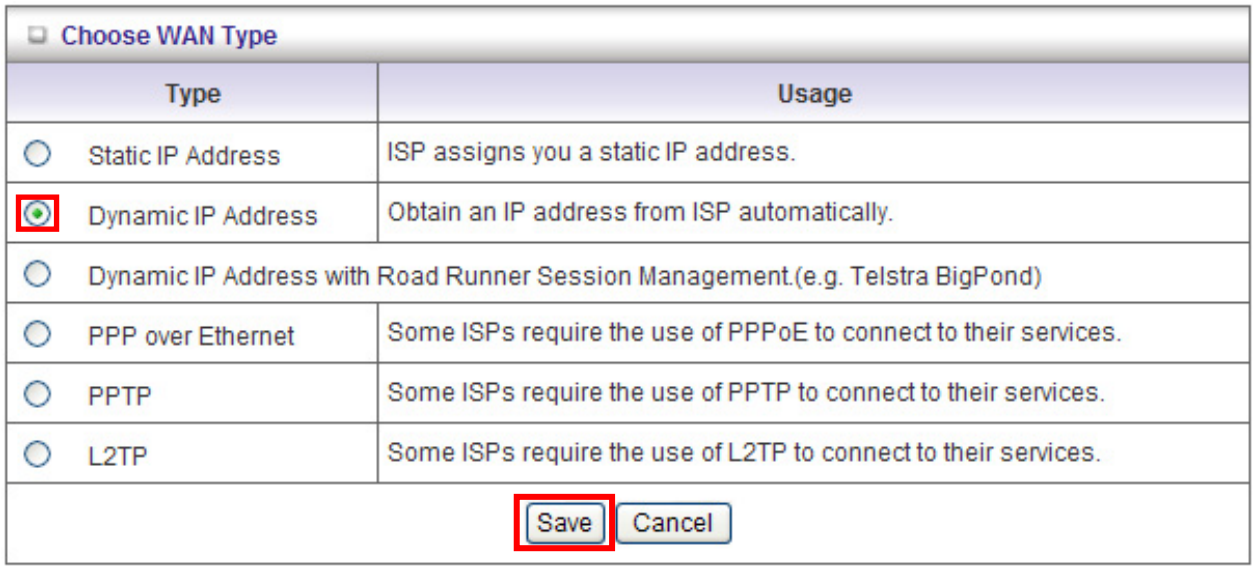

**Step 6** Select **Auto Detecting WAN Type** to let the Wizard detect which Internet connection you are using or select **Setup WAN Type Manually** to select the Internet connection type manually. Click **Next**.


Setup Wizard - WAN Type Setup
[ EXIT ]
Auto Detecting WAN Type
Setup WAN Type Manually
< Back
[ Start > Password > WAN > Wireless > Summary > Finish! ]
Next >

If you select **Setup WAN Type Manually**, please specify a WAN type you are using.

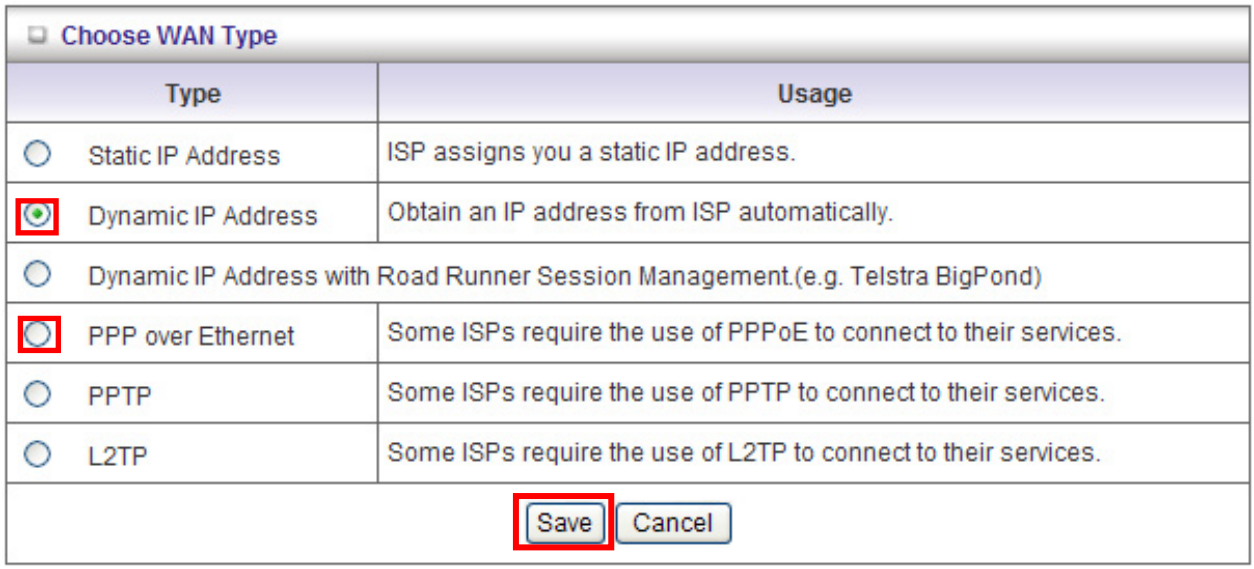
## For Cable Users:

Please select **Obtain an IP address from ISP automatically (Dynamic IP Address)**.


Choose WAN Type
Type
Usage
Static IP Address
ISP assigns you a static IP address.
Dynamic IP Address
Obtain an IP address from ISP automatically.
Dynamic IP Address with Road Runner Session Management.(e.g. Telstra BigPond)
PPP over Ethernet
Some ISPs require the use of PPPoE to connect to their services.
PPTP
Some ISPs require the use of PPTP to connect to their services.
L2TP
Some ISPs require the use of L2TP to connect to their services.
Save
Cancel

## For DSL Users:

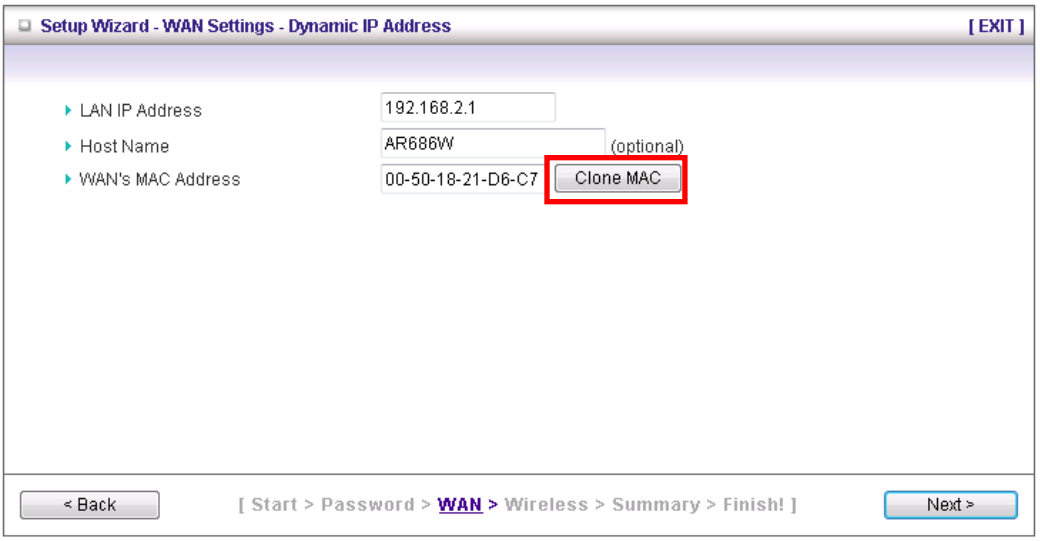
You may select either **Obtain an IP address from ISP automatically (Dynamic IP Address)** or **Some ISPs require the use of PPPoE to connect to their services (PPP over Ethernet)** depending on the type of modem provided by your ISP (Internet Service Provider). You can try both settings and determine which one works for you.


Choose WAN Type
Type
Usage
Static IP Address
ISP assigns you a static IP address.
Dynamic IP Address
Obtain an IP address from ISP automatically.
Dynamic IP Address with Road Runner Session Management.(e.g. Telstra BigPond)
PPP over Ethernet
Some ISPs require the use of PPPoE to connect to their services.
PPTP
Some ISPs require the use of PPTP to connect to their services.
L2TP
Some ISPs require the use of L2TP to connect to their services.
Save
Cancel

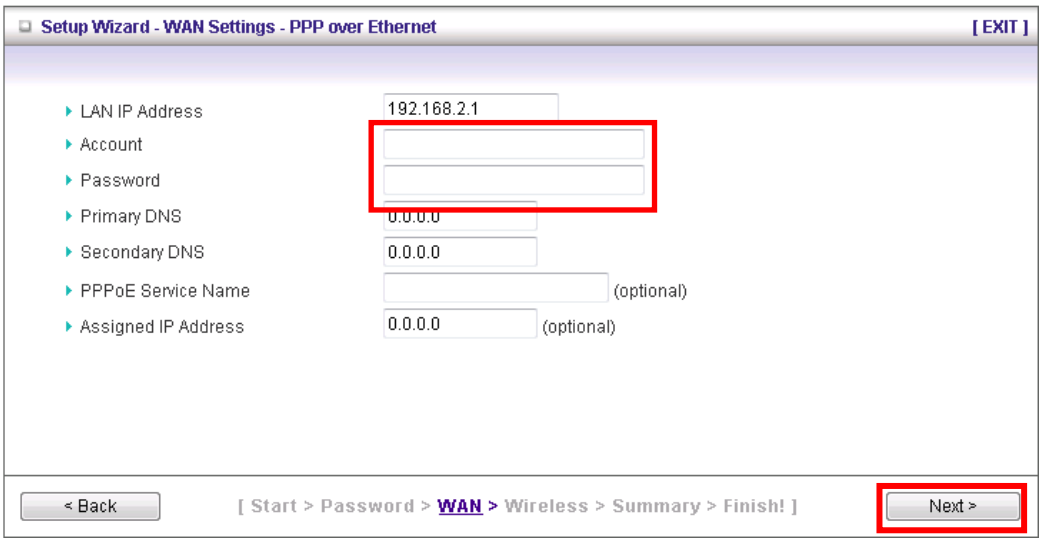
Click **Save**.

**Step 7** Configure the WAN settings according to the WAN type you selected.

**Dynamic IP Address:** Click on **Clone MAC**.



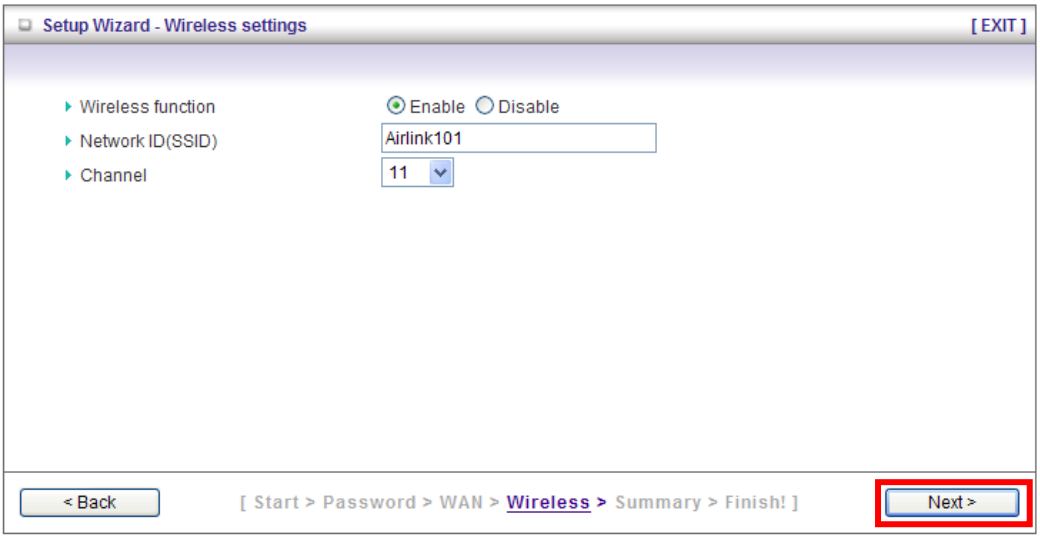

**PPP over Ethernet:** Enter the Account and Password provided by your ISP.



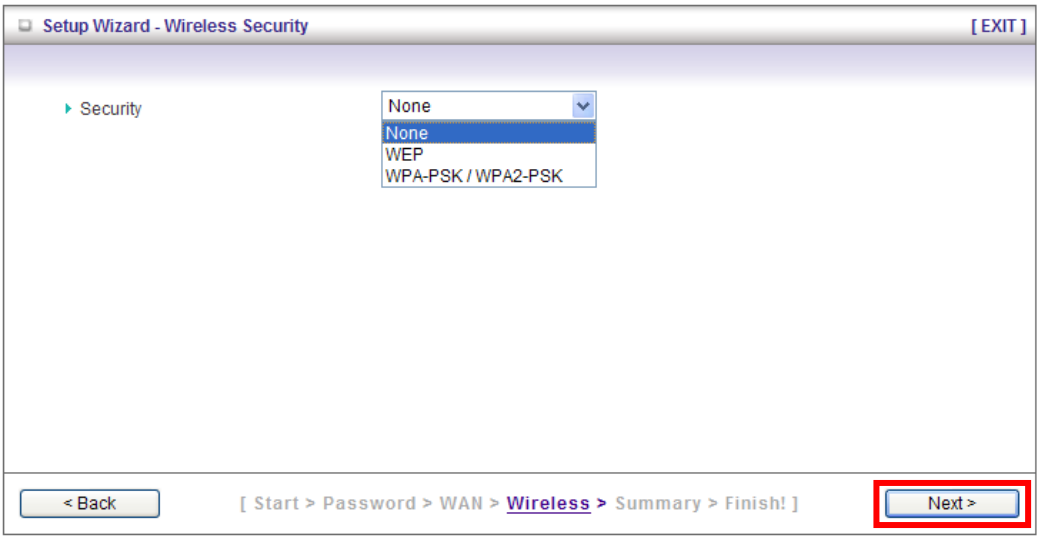

***Note:*** *Depending on the ISP, you may need to include the domain name with your user name.*

**Example: username@sbcglobal.net**

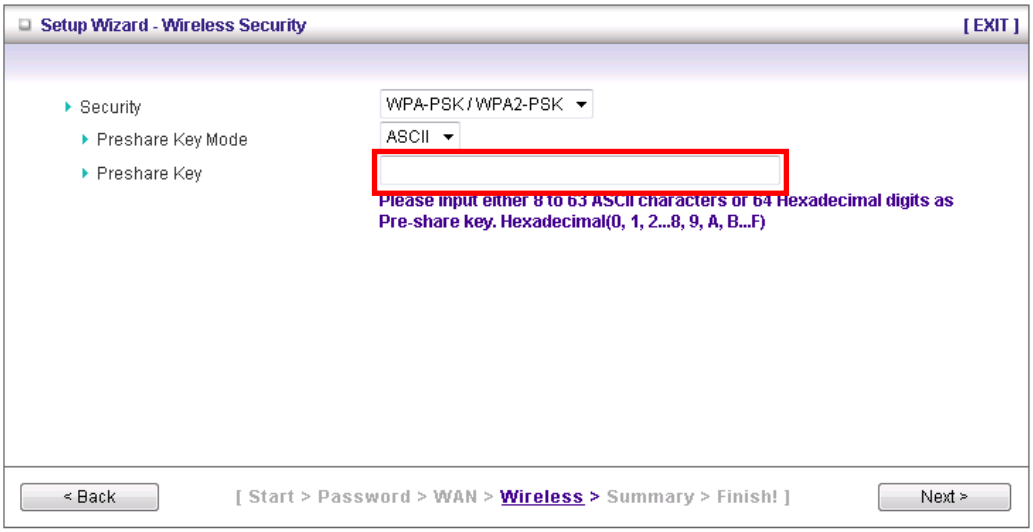
**Step 8** Keep the default SSID (wireless network name: Airlink101) or change it to a desired name, so you can always recognize your wireless network with it, for example 'myHome'. Select a channel number for your wireless network. Click **Next**.




**Step 9** Set up Wireless Security for your router. It is recommended to select **WPA2-PSK (AES)** for security to protect your wireless network from unauthorized users.

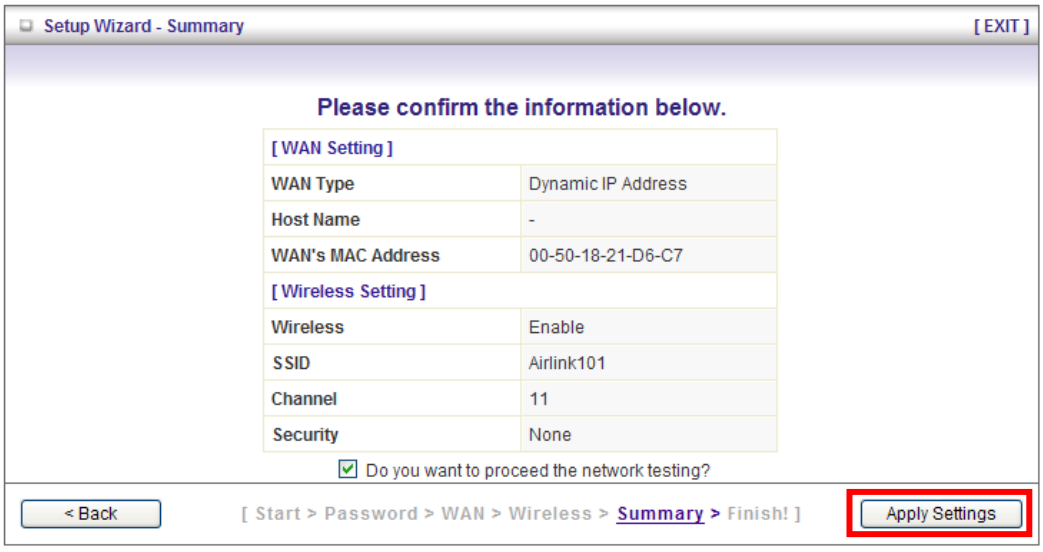


Enter 8 to 63 characters into **Preshare Key** box. Click **Next**.

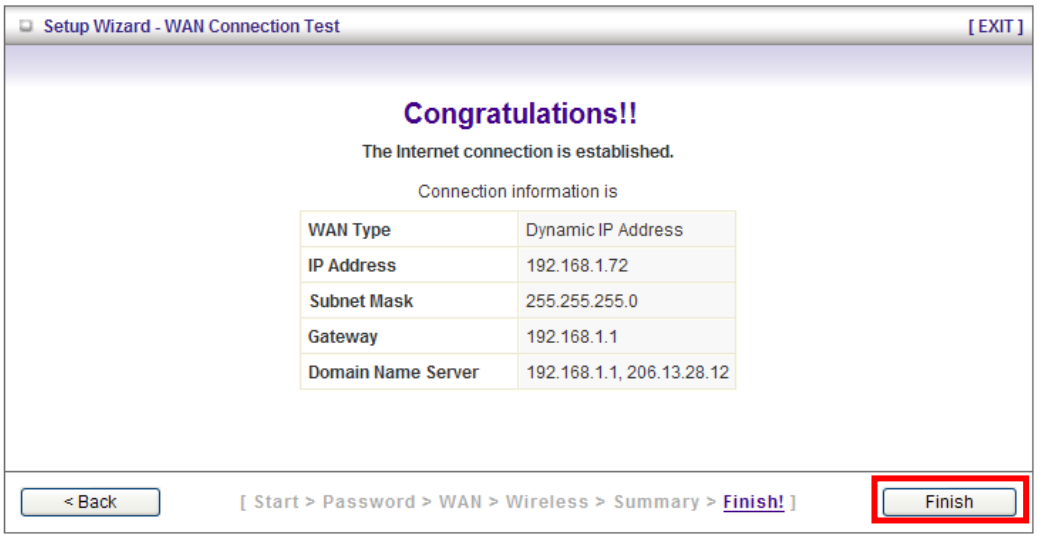

Setup Wizard - Wireless Security
[ EXIT ]
Security
WPA-PSK / WPA2-PSK
Preshare Key Mode
ASCII
Preshare Key
Please input either 8 to 63 ASCII characters or 64 Hexadecimal digits as Pre-share key. Hexadecimal(0, 1, 2...8, 9, A, B...F)
< Back
[ Start > Password > WAN > Wireless > Summary > Finish! ]
Next >

WPA2-PSK (AES) is the most secure encryption mode for general users but some old wireless adapters may not support it. Therefore, please make sure all wireless devices on your network support this security type.

**Step 10** Verify the information you have configured. If everything is correct, click **Apply Settings** to save the settings and reboot router.



**Step 11** When you see the below window, your router has been successfully connected to the Internet. Click **Finish**.

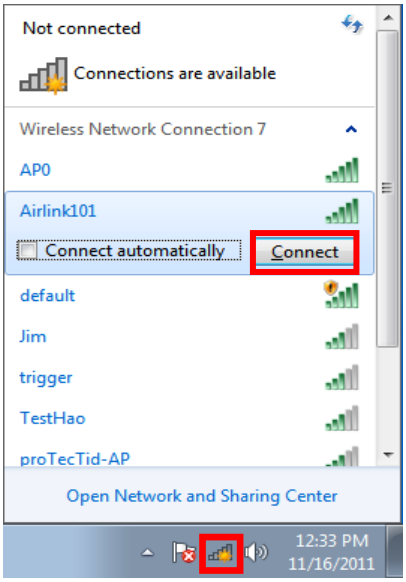



**Congratulations! Your router configuration has been finished. Please go to 2.4 Connect to the Router Wirelessly.**

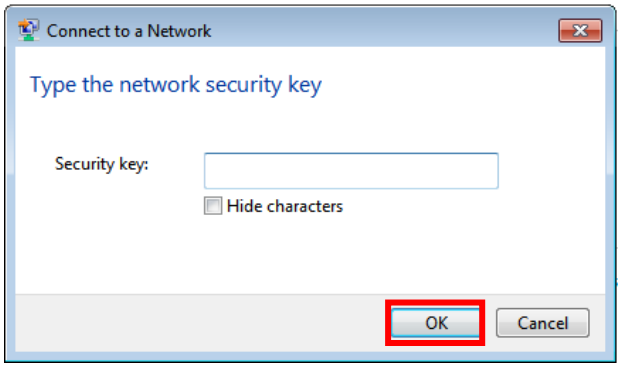
## *2.4 Connect to Router Wirelessly*

You must configure the wireless adapter from your computer in order to establish a wireless connection to the router. In this section, you can find the instructions of how to connect to the router wirelessly with your **Windows 7** computer. You can also refer to the manual of your wireless adapter on how to connect to the router.

**Step 1** Click on the wireless icon in the system tray on your desktop. A list of available network will pop up. Select the one you want to connect to and click **Connect**.




**Step 2** Enter the key you configured for the router if you have enabled the wireless security, then click **OK**. Or, you can push Easy Setup Button on the router and wireless adapter for wireless security synchronization (Please refer to Section **3.1.3.2** for details). The wireless connection should be now established.

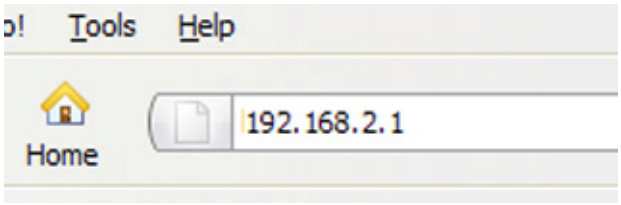


# Chapter 3 Advanced Configuration

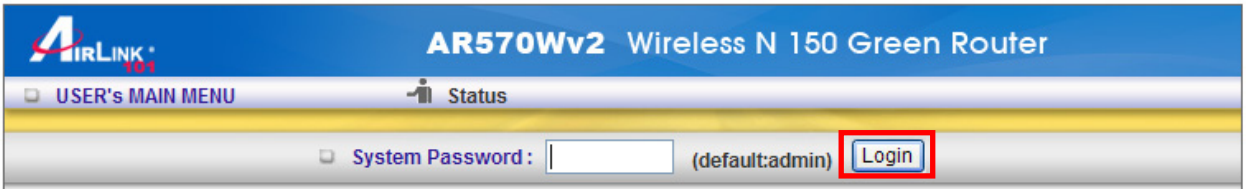
You can make advanced configurations on this router through Web Configuration Utility to meet your network's needs, such as: Virtual Server, Access Control, Network Security, etc. If you have already gone through the Setup Wizard, you do NOT need to configure anything here for you to start using the Internet.

In order to enter the Web Configuration Utility of your router, you need to first log into the router from your web browser. Please follow the steps below:

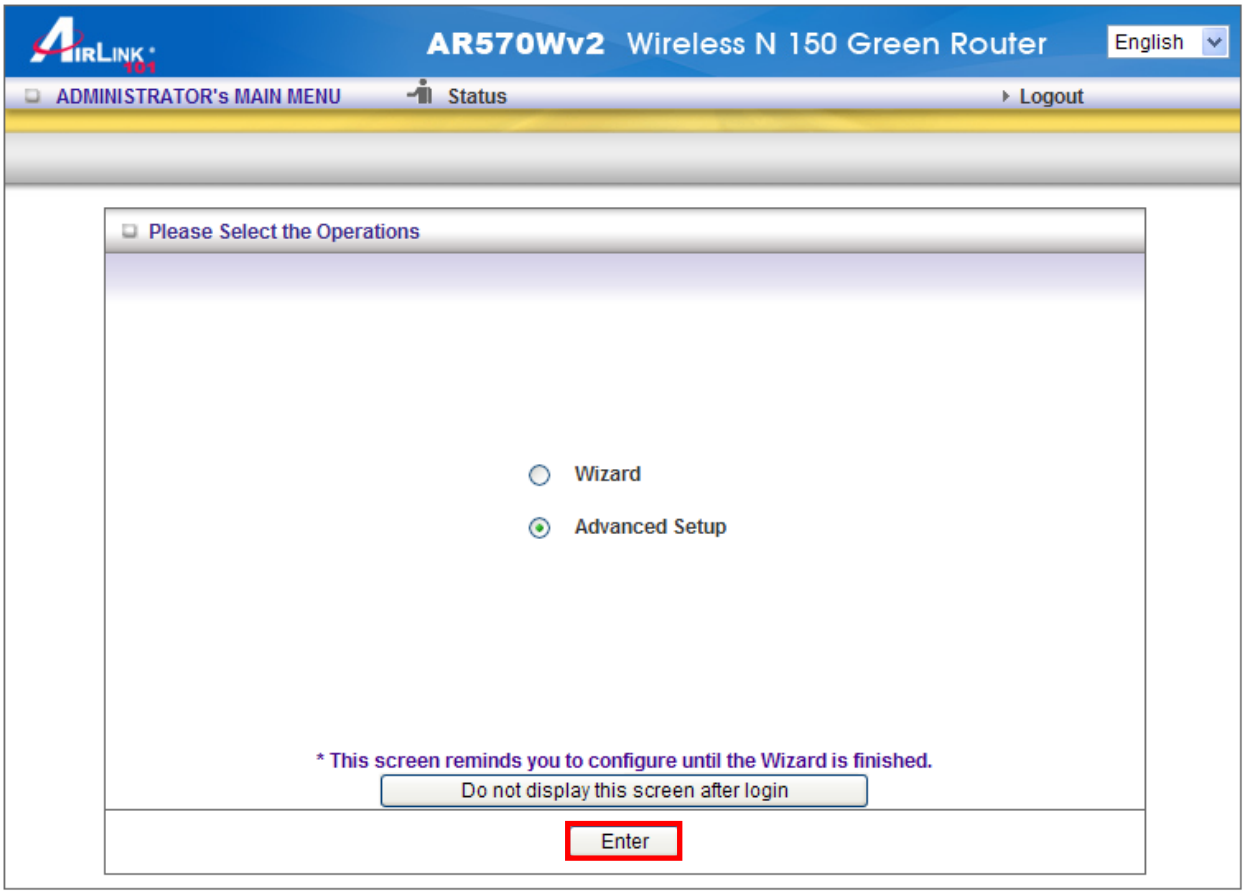
**Step 1** From the computer that is connected to the router, open the web browser (i.e. Internet Explorer or Mozilla Firefox) and type **192.168.2.1** or the IP address you assigned to this router in the address bar and press **Enter**.




**Step 2** Enter the system password and click **Login**. (The default password is "admin".)

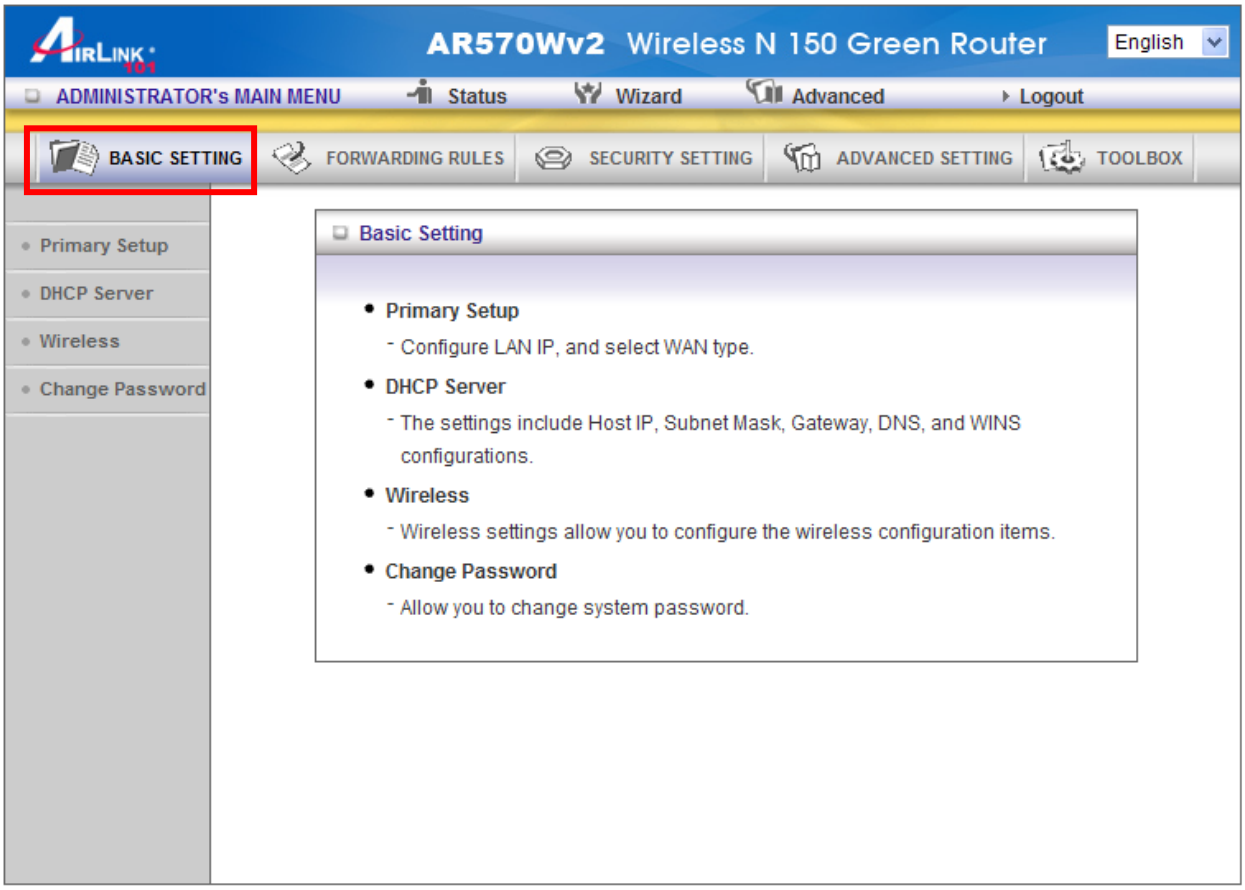


**Step 3** When you see this page pops up, you have successfully logged into the router. Select **Advanced Setup** and click **Enter** to access the complete features and settings of this router.



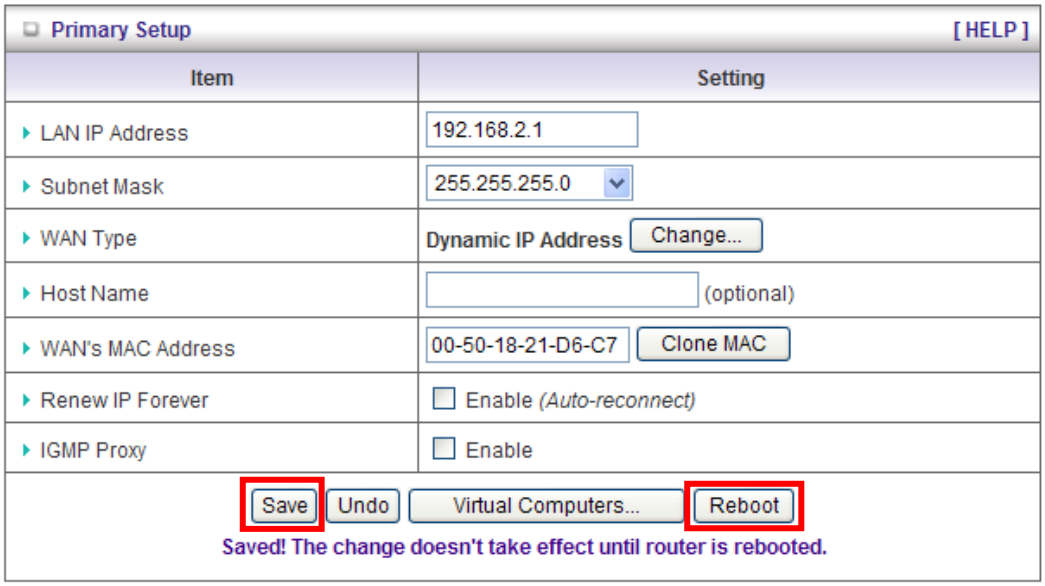
## *3.1 Basic Setting*

You can configure LAN, Internet connection type, DHCP, wireless settings and system password for the router in this page.



### *3.1.1 Primary Setup*

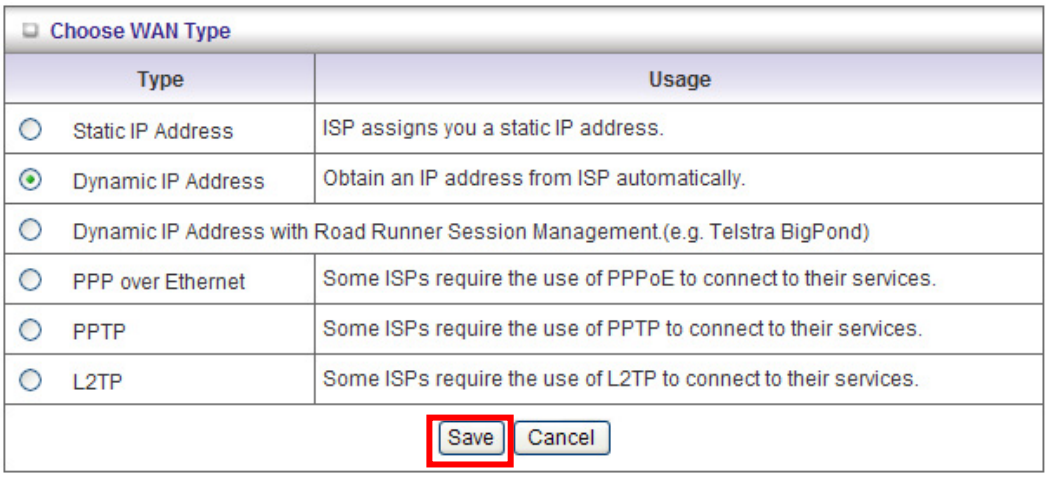
This page allows you to specify an IP address for your router, and configure the Internet connection settings.




| Parameter | Description |
|---|---|
| **LAN IP Address** | The local IP address of this router. You can change it if necessary. |
| **WAN Type** | Displaying the current WAN (Wide Area Network, i.e. Internet) connection type you configured for the router. Click "**Change**" to modify. Please see Section 3.1.1.1. If you are not sure which WAN type you are using, please contact your ISP. |
| **IGMP** | The Internet Group Management Protocol (IGMP) is a communications protocol used by hosts and adjacent routers on IP networks to establish multicast group memberships. |
| **Virtual Computers** | Please find detailed instructions in Section 3.1.1.2. |

### *3.1.1.1 WAN Type*

If you need to change router's WAN type, please click **Change** in the Primary Setup menu. You will see the following page.


Choose WAN Type
Type
Usage
Static IP Address
ISP assigns you a static IP address.
Dynamic IP Address
Obtain an IP address from ISP automatically.
Dynamic IP Address with Road Runner Session Management.(e.g. Telstra BigPond)
PPP over Ethernet
Some ISPs require the use of PPPoE to connect to their services.
PPTP
Some ISPs require the use of PPTP to connect to their services.
L2TP
Some ISPs require the use of L2TP to connect to their services.
Save
Cancel

Select a WAN type from the list and click **Save**.

A. Static IP Address: Click on Static IP Address if your ISP (Internet Service Provider) has provided you a set of IP addresses for your Internet connection.

B. Dynamic IP Address: Click on Dynamic IP if you are connecting to Internet through a cable modem.

C. Dynamic IP Address with Road Runner Session Management: This setting only works when you are using Telstra Big Pond's network service in Australia.

D. PPP over Ethernet (PPPoE): Click on PPP over Ethernet if you are connecting to Internet through a DSL modem.

Note: For DSL users, your WAN type is either **Dynamic IP Address** or **PPP over Ethernet**. If you are not sure which one you are using, it is suggested to select PPP over Ethernet for your WAN type, and if you cannot connect to the Internet with this setting, try to select Dynamic IP instead. Otherwise, you can call your ISP to confirm which WAN type you are using.

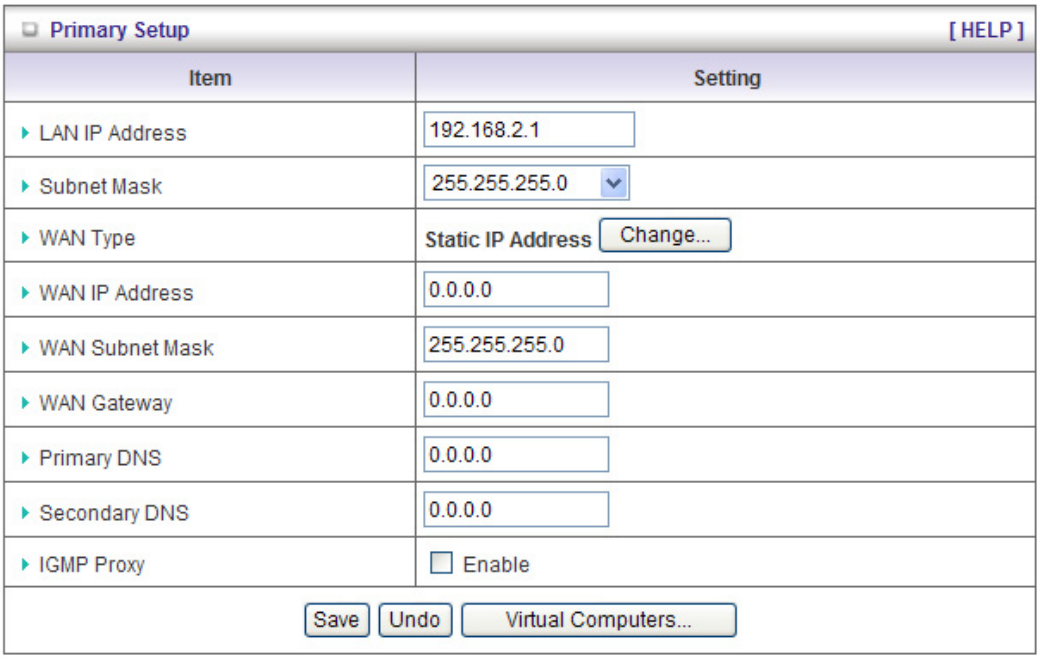
E. PPTP: Some ISPs require the use of PPTP to connect to their services.

F. L2TP: Some ISPs require the use of L2TP to connect to their services

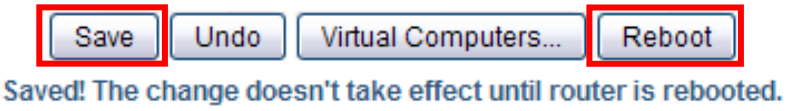
Please see the following instructions for settings of each WAN type:

## A) Static IP Address

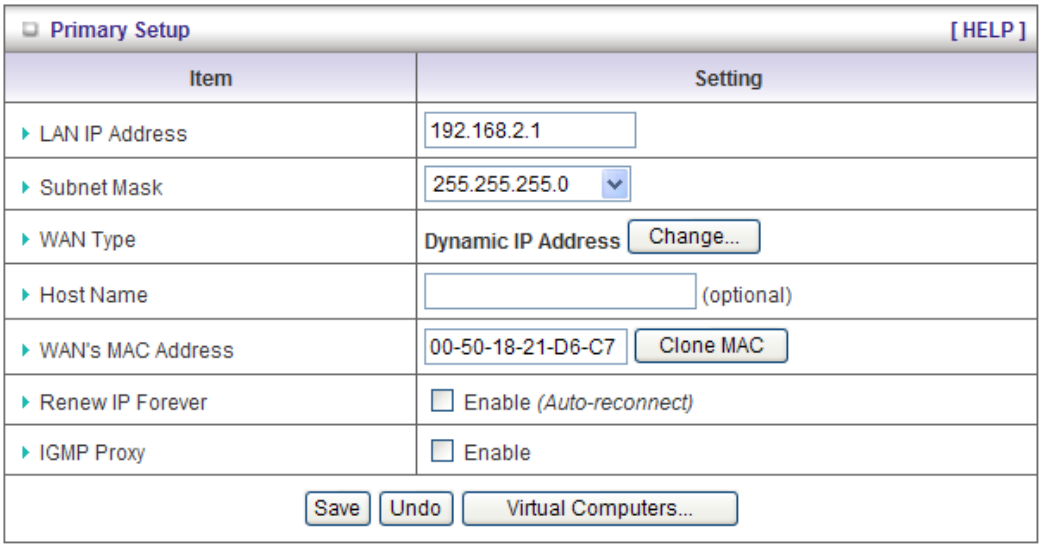
Enter the WAN IP address, WAN Subnet Mask, WAN Gateway, Primary DNS , and Secondary DNS addresses provided by your ISP.




After you've finished all settings, click **Save** to save the settings and click **Reboot**. The change will take effect after rebooting the router.

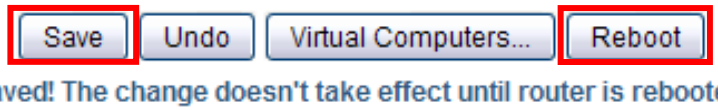


## B) Dynamic IP Address



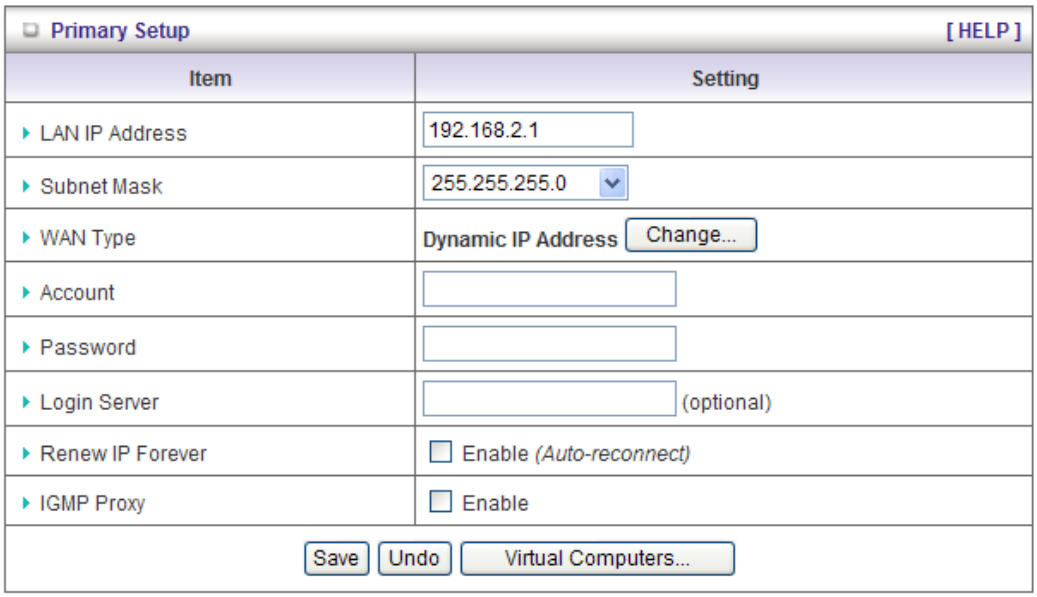

| Parameter | Description |
|---|---|
| **Host Name** | Please input the host name of your router; this is optional and only required if your service provider asks you to do so. |
| **WAN's MAC Address** | Please input MAC address of your computer here if your ISP only permits computer with certain MAC address to access Internet. If you are using the computer which used to connect to Internet via cable modem, you can simply press '**Clone MAC**' button to fill the WAN's MAC address field with the MAC address of your computer. |
| **Renew IP Forever** | Check **Enable** to let router reconnect to your ISP when the connection is dropped. |

After you've finished all settings, click **Save** to save the settings and click **Reboot**. The change will take effect after rebooting the router.



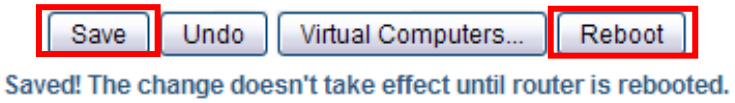
## C) Dynamic IP Address with Road Runner Session Management:

Please enter the account and password provided by your Telstra Big Pond ISP.

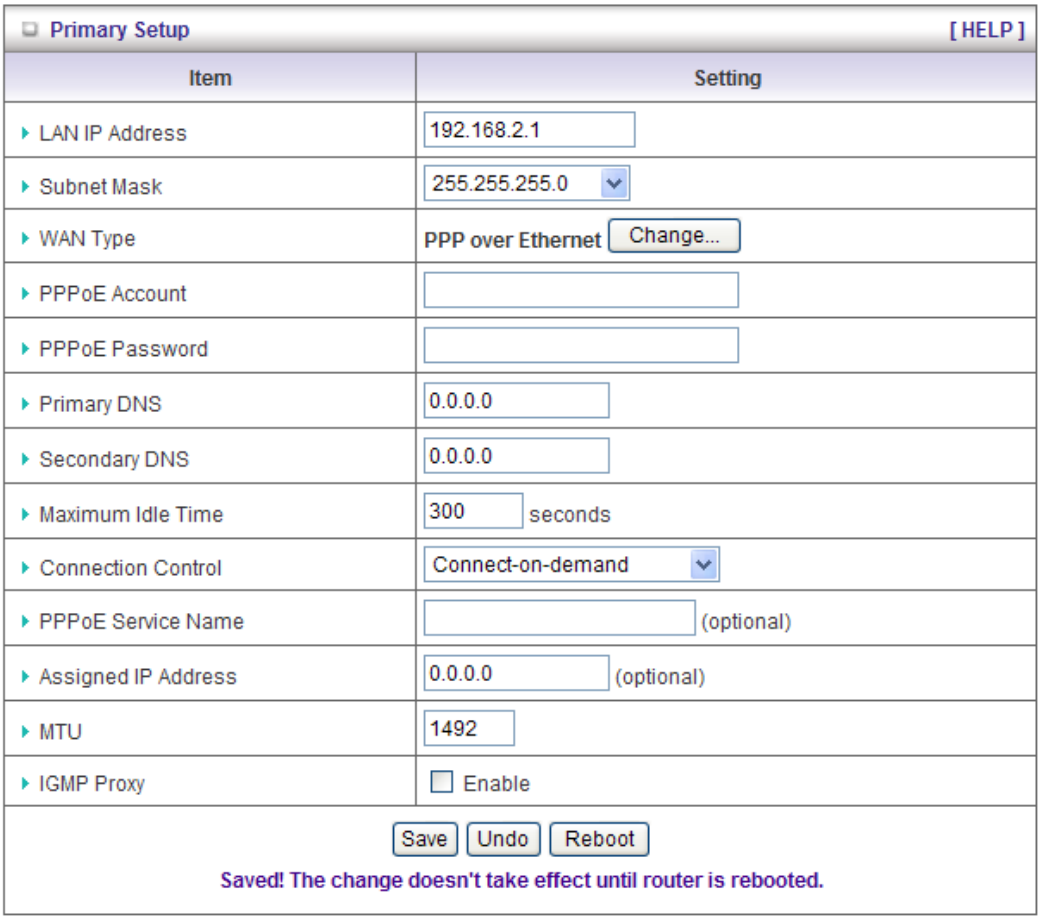



| Parameter | Description |
|---|---|
| **Account** | Please input user name of your account assigned by Telstra. |
| **Password** | Please input the password assigned by Telstra. |
| **Login Server** | Please input the IP address of login server here. (Optional) |

After you've finished all settings, click **Save** to save the settings and click **Reboot**. The change will take effect after rebooting the router.



## D) PPP Over Ethernet (PPPoE)



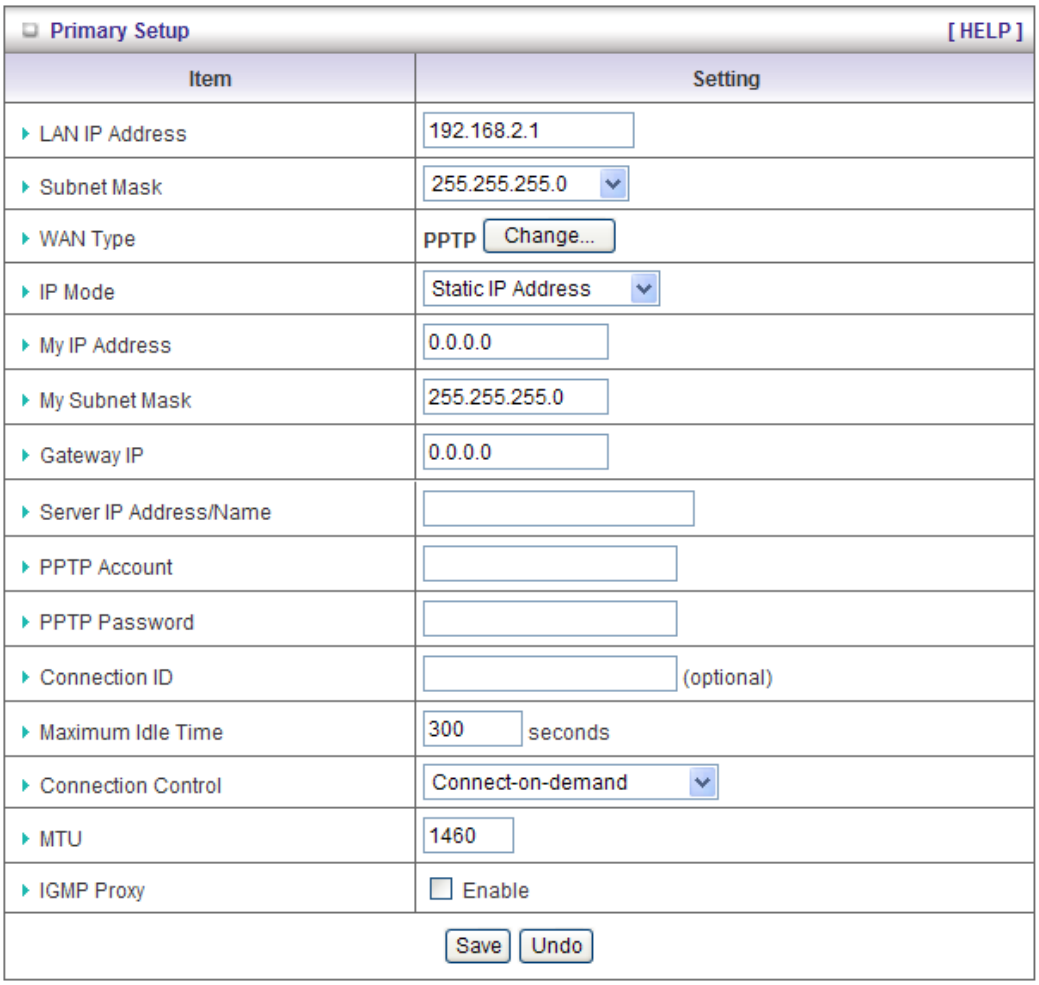

| Parameter | Description |
|---|---|
| **PPPoE Account** | Enter the User Name for your DSL account. You can obtain this information from your ISP. |
| **PPPoE Password** | Enter the Password for your DSL account. You can obtain this information from your ISP. |
| **Primary DNS** | This feature allows you to assign a Primary DNS Server. You can obtain this information from your ISP. If your ISP does not provide this information, you can leave it blank. |
| **Secondary DNS** | This feature allows you to assign a Secondary DNS Server. You can obtain this information from your ISP. If your ISP does not provide this information, you can leave it blank. |
| **Maximum Idle Time** | This feature allows you to set up the amount of time of inactivity before disconnecting your PPPoE session. Set it to zero or |

| | |
|---|---|
| | enable Auto-reconnect to disable this feature. |
| **Connection Control** | There are 3 modes for you to control the Internet connection:<br>**Connect-on-demand:** Router will connect to the ISP when its clients send outgoing packets.<br>**Auto Reconnect (Always-on):** Router will keep the connection to the ISP after the connection is established.<br>**Manually:** Router will not connect to the ISP until user clicks the Connect button on the Status-page. |
| **PPPoE Service Name** | Enter the DSL service company. This is optional. |
| **Assigned IP Address** | Input the IP address you wish to use. This is optional. |
| **MTU (Maximum Transmission Unit)** | The most common MTU value is 1492. You can configure it as your ISP suggested. |

---

After you've finished all settings, click **Save** to save the settings and click **Reboot**. The change will take effect after rebooting the router.

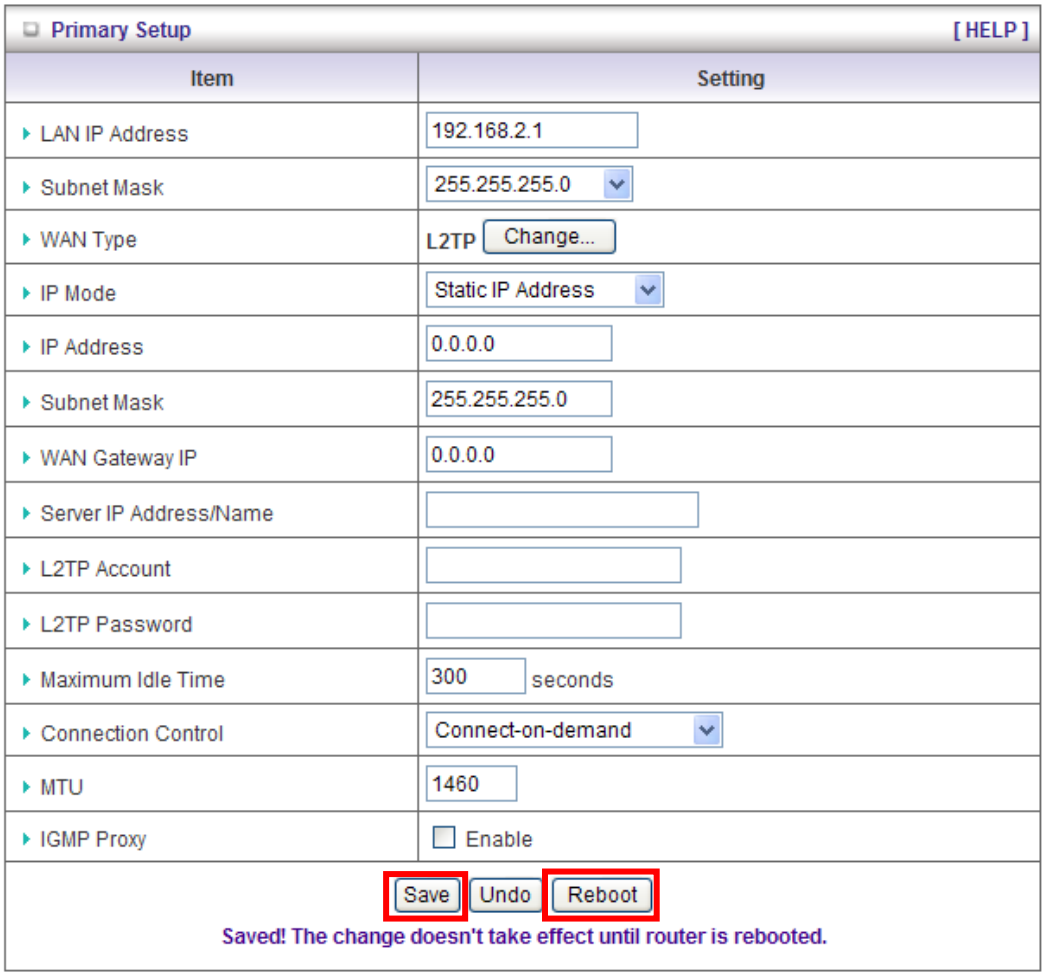
## E) PPTP




| Parameter | Description |
|---|---|
| **IP Mode** | Select the type of how you obtain IP address from your service provider here: Static IP Address or Dynamic IP Address. |
| **My IP Address** | Enter the IP address assigned by your ISP if you select Static IP Address. |
| **My Subnet Mask** | Enter the Subnet Mask assigned by your ISP if you select Static IP Address. |
| **Gateway IP** | Enter the Gateway IP address assigned by your ISP if you select Static IP Address. |
| **Server IP Address/Name** | Enter the IP address of the PPTP server. |
| **PPTP Account** | Enter the User Name for your PPTP account here. You can |

| | |
|---|---|
| | obtain this information from your ISP. |
| **PPTP Password** | Enter the password for your PPTP account here. You can obtain this information from your ISP. |
| **Connection ID** | Enter the connection ID if your ISP requires it. This is optional. |
| **Maximum Idle Time** | This feature allows you to set up the amount of time of inactivity before disconnecting your PPTP session. Set it to zero or enable “Auto-reconnect” to disable this feature. |
| **Connection Control** | There are 3 modes for you to control the Internet connection:<br>**Connect-on-demand:** Router will connect to the ISP when its clients send outgoing packets.<br>**Auto Reconnect (Always-on):** Router will keep the connection to the ISP after the connection is established.<br>**Manually:** Router will not connect to the ISP until user clicks the Connect button on the Status-page. |
| **Maximum Transmission Unit (MTU)** | Most ISPs offer MTU value to users. The default MTU value is 0 (auto). |

## E) L2TP

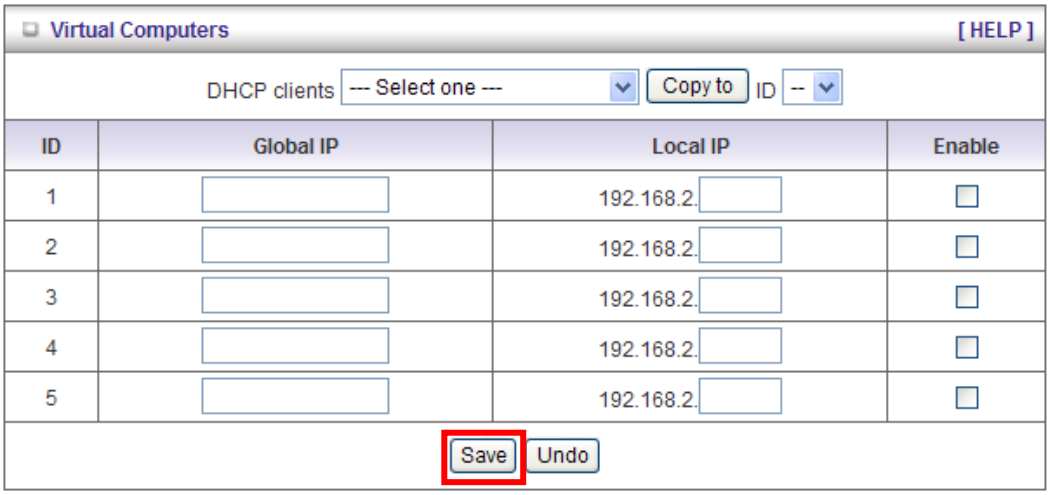



| Parameter | Description |
|---|---|
| **IP Mode** | Select the type of how you obtain IP address from your service provider here: Static IP Address or Dynamic IP Address. |
| **IP Address** | Enter the IP address assigned by your ISP if you select Static IP Address. |
| **Subnet Mask** | Enter the Subnet Mask assigned by your ISP if you select Static IP Address. |
| **WAN Gateway IP** | Enter the Gateway IP address assigned by your ISP if you select Static IP Address. |
| **Server IP Address/Name** | Enter the IP address of the L2TP server. |
| **L2TP Account** | Enter the User Name for your L2TP account here. You can obtain this information from your ISP. |
| **L2TP Password** | Enter the password for your L2TP account here. You can obtain |

| | |
|---|---|
| | this information from your ISP. |
| **Maximum Idle Time** | This feature allows you to set up the amount of time of inactivity before disconnecting your L2TP session. Set it to zero or enable “Auto-reconnect” to disable this feature. |
| **Connection Control** | There are 3 modes for you to control the Internet connection:<br>**Connect-on-demand:** Router will connect to the ISP when its clients send outgoing packets.<br>**Auto Reconnect (Always-on):** Router will keep the connection to the ISP after the connection is established.<br>**Manually:** Router will not connect to the ISP until user clicks the Connect button on the Status-page. |
| **Maximum Transmission Unit (MTU)** | Most ISPs offer MTU value to users. The default MTU value is 0 (auto). |

### *3.1.1.2 Virtual Computers*

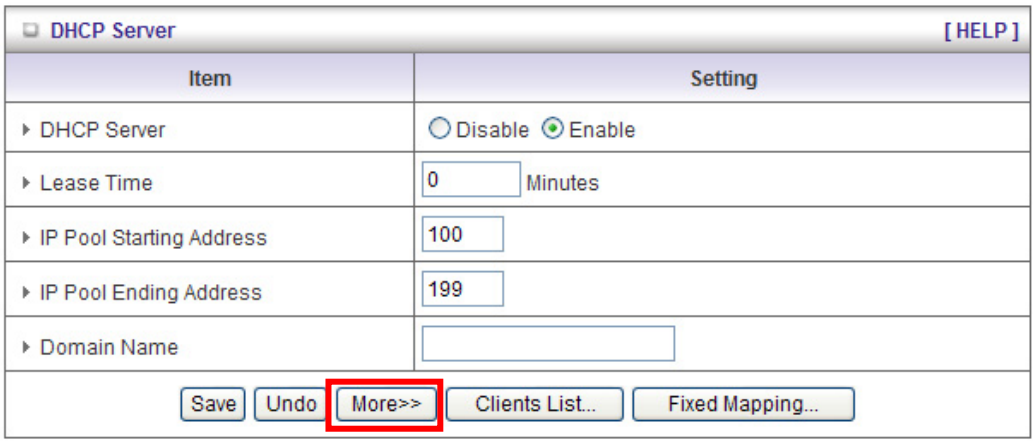
Virtual Computer enables you to use the original NAT feature, and allows you to set up the one-to-one mapping of multiple global IP addresses and local IP addresses.



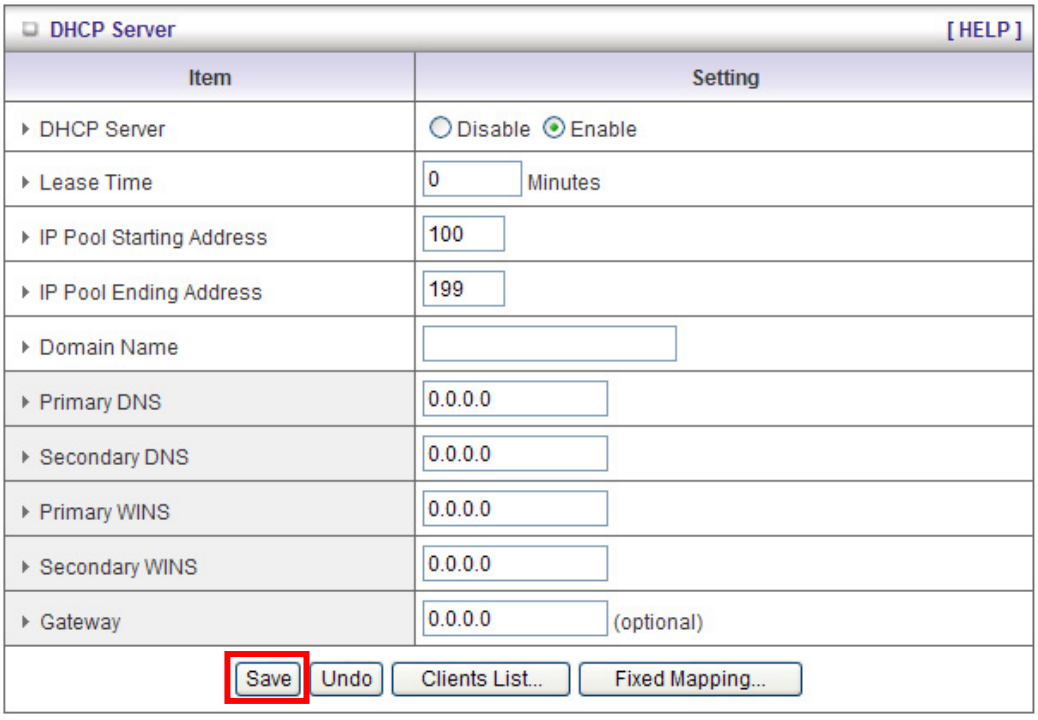

| Parameter | Description |
|---|---|
| **Global IP** | Enter the global IP address assigned by your ISP. |
| **Local IP** | Enter the local IP address (virtual IP address) of your LAN computer corresponding to the global IP address. |
| **Enable** | Check Enable box to enable the Virtual Computer mapping rule. |

### *3.1.2 DHCP Server*

This page allows you to configure the DHCP settings for your router.




Press button “More>>” for more options.




| Parameter | Description |
|---|---|
| **DHCP Server** | Select to Disable or Enable the DHCP server. |
| **Lease Time** | This is DHCP dynamic IP lease time assigned to the DHCP clients. Please enter a number between 5 to10080. 10080 |

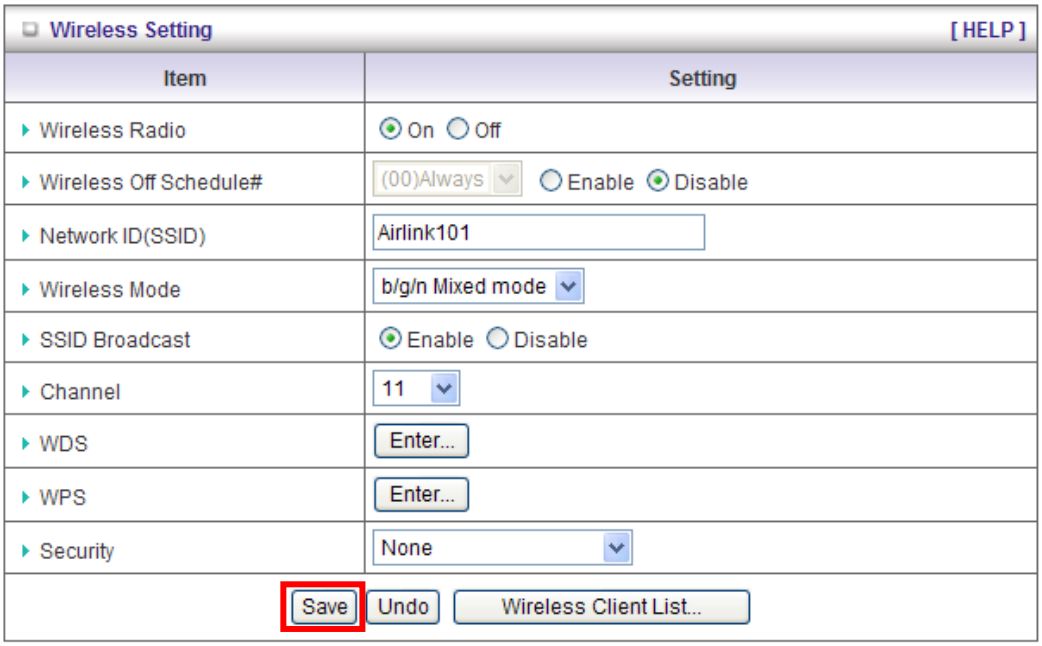
| | |
|---|---|
| | Minutes = 7 days. |
| **IP Pool Starting/Ending Address** | Whenever there is a request from a network client, the DHCP server will automatically allocate an unused IP address from the IP address pool to the requesting computer. You must specify a range by entering the starting / ending address of the IP address pool. |
| **Domain Name** | This is optional. This information will be passed to the clients. |
| **Primary DNS/Secondary DNS** | This is optional. This feature allows you to assign a Primary / Secondary DNS Server. |
| **Primary WINS/Secondary WINS** | This is optional. This feature allows you to assign a WINS Server. |
| **Gateway** | This is optional. Gateway address can be the IP address of an alternate Router. |
| **Clients List** | Click Clients List to view DHCP clients. |

---

Click **Save** to save the settings you made.

### *3.1.3 Wireless*

You can set parameters that are used for wireless clients to connect to this router. The parameters include SSID, Channel Number, Encryption, etc.

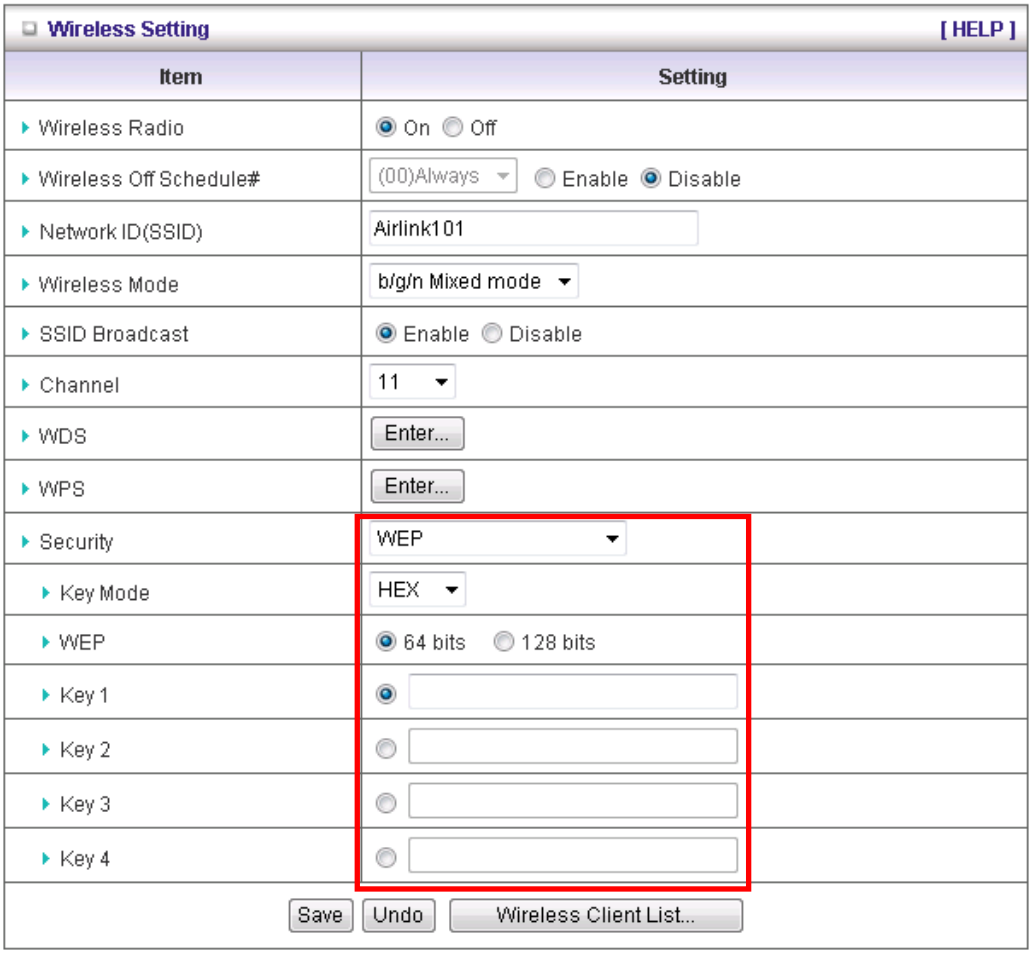



| Parameters | Default | Description |
|---|---|---|
| **Wireless Radio** | Enable | Enable or disable wireless function. |
| **Wireless Off Schedule#** | Disable | Select a pre-defined schedule rule from the drop-down menu and select Enable, then the router will turn on/off wireless function according to the schedule rule. Please refer to Section 3.4.7 for how to set up the Schedule Rule. Click on Disable to disable this feature if you want to keep wireless function always on. |
| **Network ID (SSID)** | Airlink101 | This is the name of your wireless network. You can type any alphanumeric characters here, maximum 32 characters. SSID is used to identify your own wireless router from others when there are multiple wireless routers in the same area. It's recommended to change default SSID value to the one that is easy to identify for you, such as "myhome", "office_room1", etc. |
| **Wireless Mode** | 11b/g/n mixed | Please select the wireless mode from one of the |

| | | |
|---|---|---|
| | | following options:<br><br>11b/g/n mixed: 2.4GHz band, allows 802.11b, 802.11g, and 802.11n wireless network clients to connect to this router (maximum transfer rate 11Mbps for 802.11b clients, maximum 54Mbps for 802.11g clients, and maximum 150Mbps for 802.11n clients*).<br><br>11b Only: 2.4GHz band, only allows 802.11b wireless network clients to connect to this router (maximum transfer rate 11Mbps*).<br><br>11g Only: 2.4GHz band, only allows 802.11g wireless network clients to connect to this router (maximum transfer rate 54Mbps*).<br><br>11n Only: 2.4GHz band, only allows 802.11n wireless network clients to connect to this router (maximum transfer rate 150Mbps*). |
| **SSID Broadcast** | Enable | Select Enable to broadcast the SSID so that your wireless client can detect it on the available wireless network list. |
| **Channel** | 11 | Please select a channel from the drop-down list of 'Channel Number' for broadcasting. You can choose any channel number you want to use. |
| **WDS** | | Please see 3.1.3.1 for WDS settings. |
| **WPS** | | Please see 3.1.3.2 for WPS settings. |
| **Security** | | You can choose None, WEP, 802.1x and RADIUS, WPA-PSK, WPA2-PSK, WPA, WPA2 for encryption mode. The detailed settings will appear after you choose an encryption. Please see below instructions for each Security type for more details. |
| **Wireless Client List** | | Please see 3.1.3.3 for Wireless Client List information. |

## Configuring Security - WEP

*Note: IEEE802.11n only supports WPA2-PSK or WPA-PSK AES encryption. If you use WEP as your encryption, wireless data rate will drop to 54Mbps (802.11g standard).*



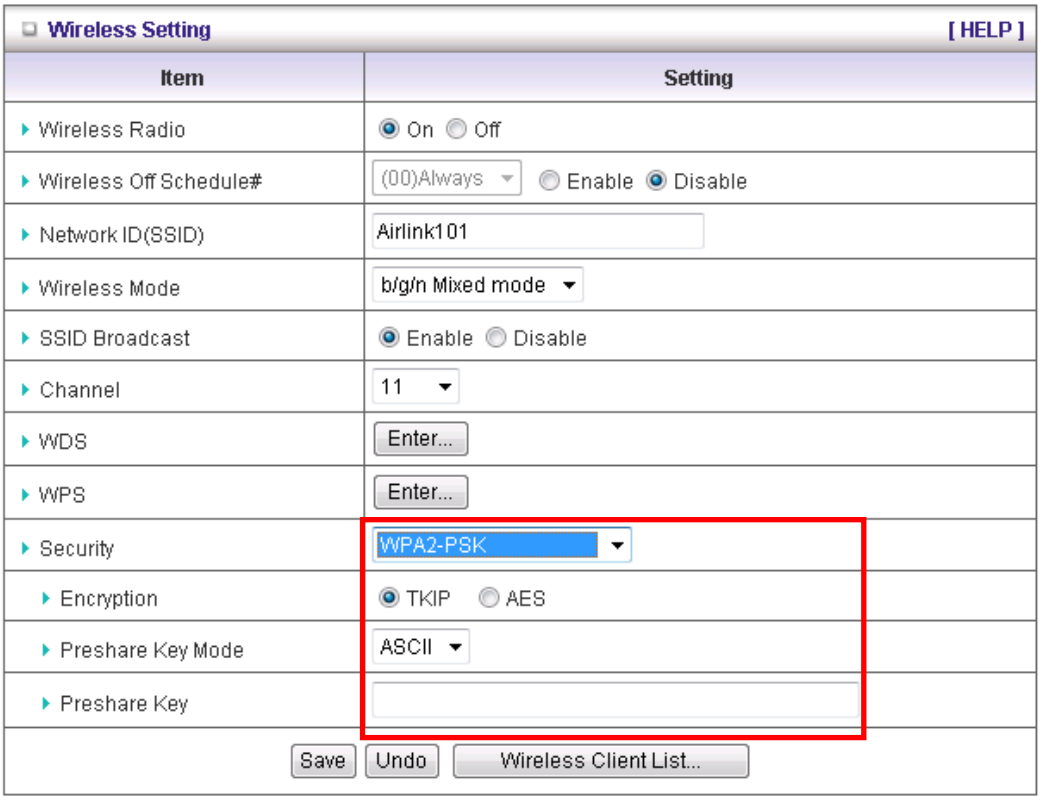

**Key Mode**: Select HEX or ASCII. You can select ASCII (alphanumeric format) or Hexadecimal (in the “a~f” and “0~9” range) for the key format.

**WEP**: Select 64 bits or 128 bits key length.

**Key 1~4**: Select a WEP Key you wish to use and enter key value.
If you select HEX and 64 bits, enter a 10-digit Hex key, for example, “12345abcde”.
If you select ASCII and 64 bits, enter a 5-digit ASCII key, for example, “xyz01”.
If you select HEX and 128 bits, enter a 26-digit Hex key, for example, “12345abcde67890bcdef123456”.
If you select ASCII and 128 bits, enter a 13-digit ASCII key, for example, “wepkeyexample”.

## Configuring Security - WPA-PSK / WPA2-PSK

Wi-Fi Protected Access (WPA) is an advanced security standard. You can use a pre-shared key (PSK) to authenticate wireless stations and encrypt data during communication, so the encryption key is not easy to be broken by hackers. This can greatly improve your wireless security.WPA2-PSK AES is the most secure setting for general users.




**Security**: Select WPA-PSK or WPA2-PSK

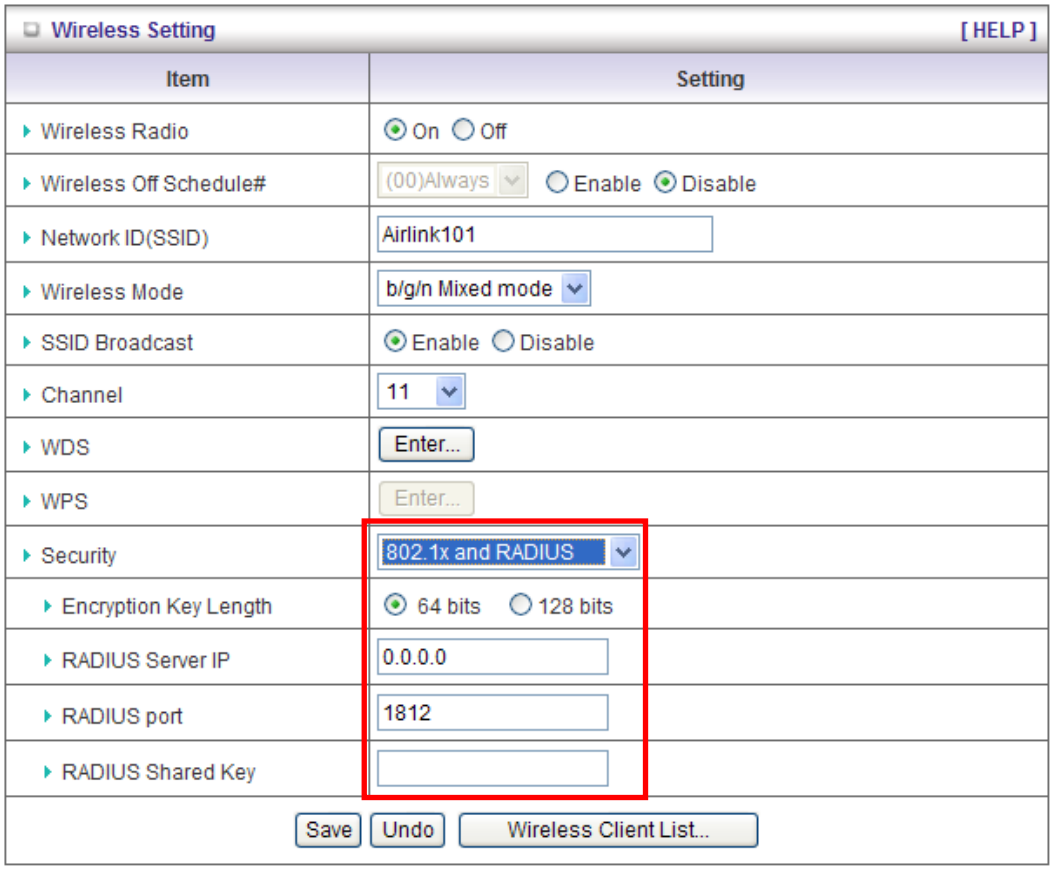
**Encryption**: Select either AES or TKIP. It is suggested to select AES if all your wireless devices support this encryption mode.

*Note: IEEE802.11n only supports AES encryption. If you use TKIP as your encryption, wireless data rate will drop to 54Mbps (802.11g standard).*

**Preshare Key**: Enter 8~63 characters as the security key of your wireless network.

## Configuring Security – 802.1x and RADIUS

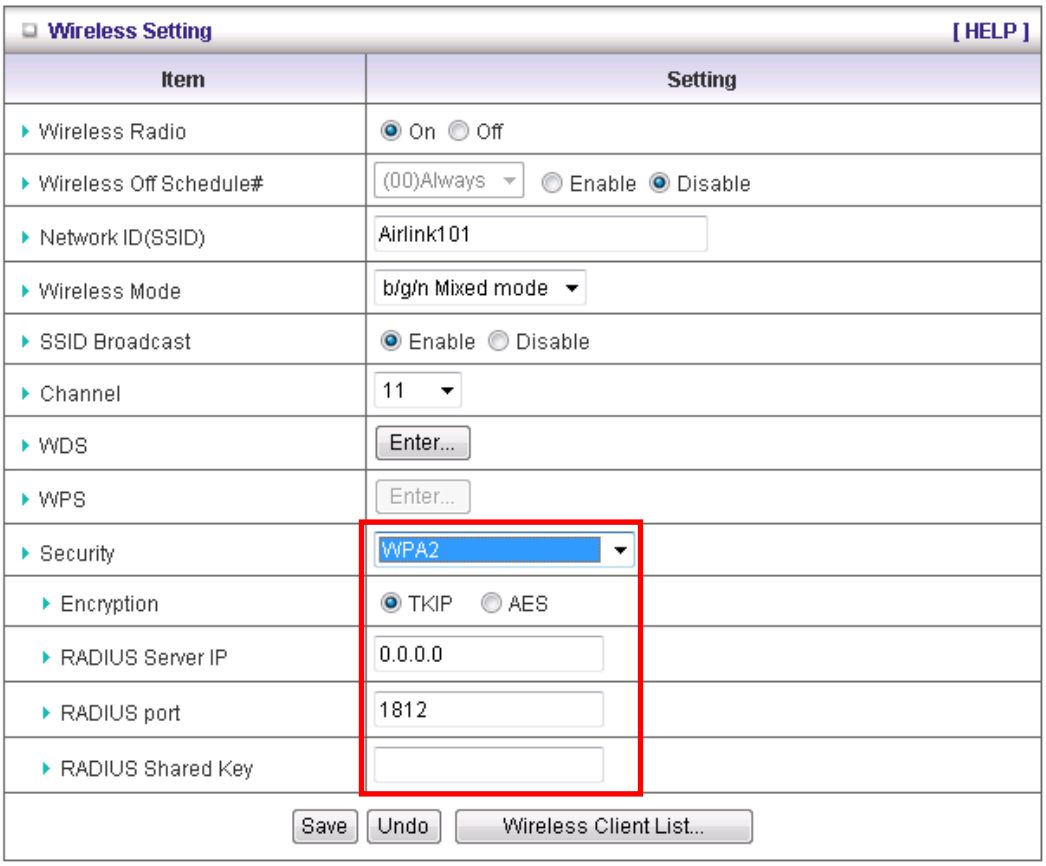
When the 802.1x function is enabled, wireless users must authenticate this router first to use the network service. The most common method of implementing 802.1x is by having a RADIUS Server (contain an authentication database) on your LAN, so the router can work simultaneously with it and get user's authentication profile for comparison.




**Encryption Key Length**: You can select either 64 bits or 128 bits.
**RADIUS Server IP**: The RADIUS server's IP address.
**RADIUS port**: The RADIUS server's service port.
**RADIUS Shared Key**: Key value shared by the RADIUS server and this router. This key value should be consistent with the one in the RADIUS server.

## Configuring Security - WPA / WPA2

Wi-Fi protected Access (WPA) is designed to improve data protection and implement access control for Wireless LAN system. It encrypts frames transmitted through wireless module using the key dynamically obtained from RADIUS Server.



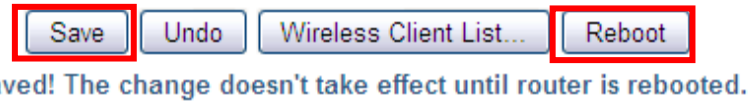

**Encryption**: Select either AES or TKIP. It is suggested to select AES if all your wireless devices support this encryption mode.

**RADIUS Server IP**: The RADIUS server's IP address.

**RADIUS port**: The RADIUS server's service port.

**RADIUS Shared Key**: Key value shared by the RADIUS server and this router. This key value should be consistent with the one in the RADIUS server.

After you finished all settings, click **Save** to save the settings and click **Reboot**. The change will take effect after rebooting the router.

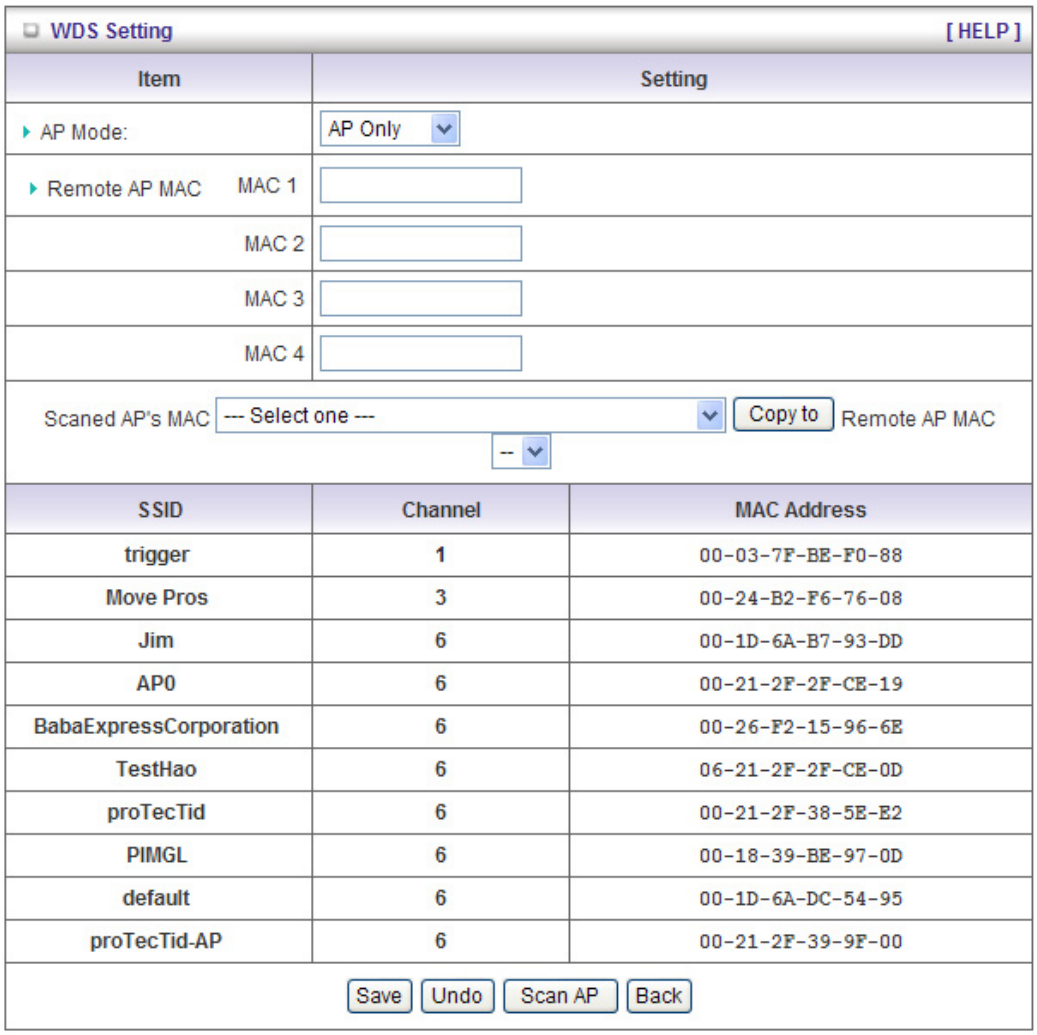


### *3.1.3.1 WDS*

The Wireless Distribution System (WDS) provides wireless point-to-point, and point-to-multipoint bridging for deployment over large area. With the WDS feature, the Wireless LAN coverage can be easily extended.

*Note: WDS-enabled routers or APs from different manufacturers are not guaranteed to work with AR570Wv2. It is recommended to deploy WDS with solely Airlink101® AR570Wv2.*

*When WDS is enabled, it only supports None and WEP encryption.*



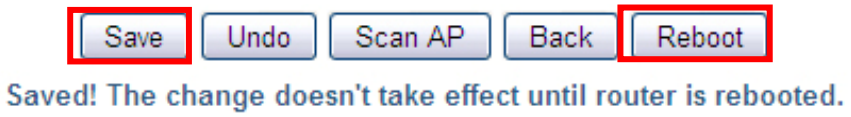

Before you set up WDS bridging:

1) Make sure your wireless computer can associate with individual router/AP.

2) Configure the same channel for every router/AP.
3) Configure a unique different SSID for every router/AP in order to distinguish each unit on your wireless LAN.
4) Configure a static IP address for every router/AP. Make sure all IP addresses are based on the same subnet mask, and out of your DHCP client range.

| Parameters | Description |
|---|---|
| **AP Mode** | **AP Only**: WDS function is disabled.<br>**WDS Only**: The router is functioning as a bridge to connect with other WDS enabled AP/Router. Wireless client is not able to connect to the router at WDS Only mode.<br>**Hybrid**: The router is functioning as a bridge as well as an AP that allows wireless client association at the same time. (Note: the data throughput is halved with Hybrid mode.) |
| **Remote AP MAC** | Enter the MAC address of other WDS enabled AP/Router into MAC 1 ~ MAC4. This feature allows you to bridge up to 4 AR570Wv2 routers. It is suggested to use “Copy to” function to avoid any typo. |
| **Scanned AP’s MAC** | Click on the drop-down menu to select an AP you wish to bridge to. Select a number from the drop-down menu of Remote AP MAC and click **Copy to**. The MAC address will be automatically filled into the corresponding MAC address field above. |
| **Scan AP** | Click Scan AP to find the available wireless Router/AP that you wish to bridge. If the wireless router/AP is not showing in the list, it may be out of range, and you need to move it closer in order to build the bridge connection. |

After you finished all settings, click **Save** to save the settings and click **Reboot**. The change will take effect after rebooting the router.



### *3.1.3.2 Easy Setup Button (WPS™ compatible)*

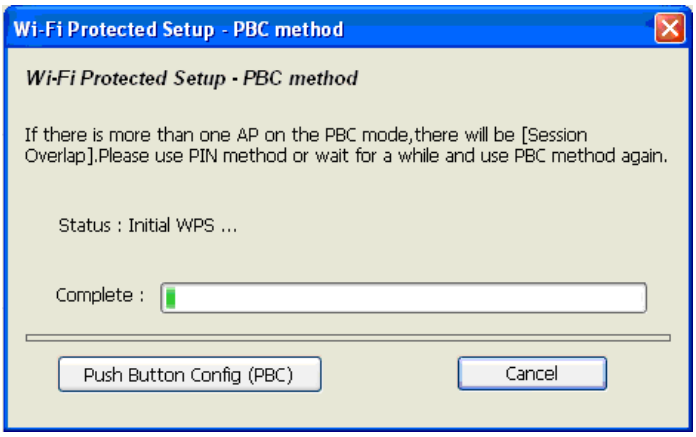
The AR570Wv2 Wireless N 150 Green Router has a built-in Easy Setup Button (WPS™ compatible) which allows you to build secured wireless connection between your wireless adapters and the router quickly and easily. **Please make sure your wireless device supports this feature as well.** If not, you will need to set up the wireless security manually and you can skip this section.

In the instructions below, we are going to use the AWLL5099 Airlink101® Wireless N 150 USB Ultra Mini Adapter as an example.

*Note: You may have different wireless adapter installed in your computer. You can refer to the user's manual from the manufacturer. Different adapters have different ways to trigger WPS configuration.*

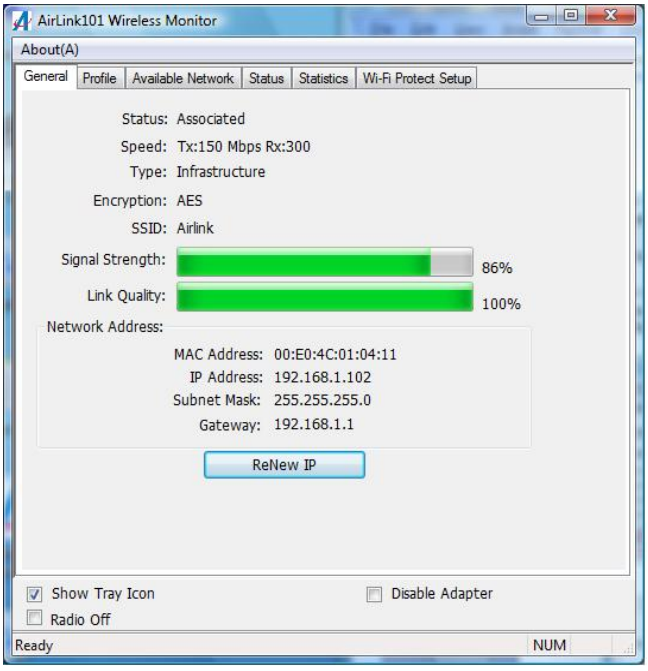
**Step 1** Connect wireless USB adapter to your computer with installed driver.

**Step 2** Push and hold the Easy Setup Button on the Adapter until you see the following window pops up on the screen.

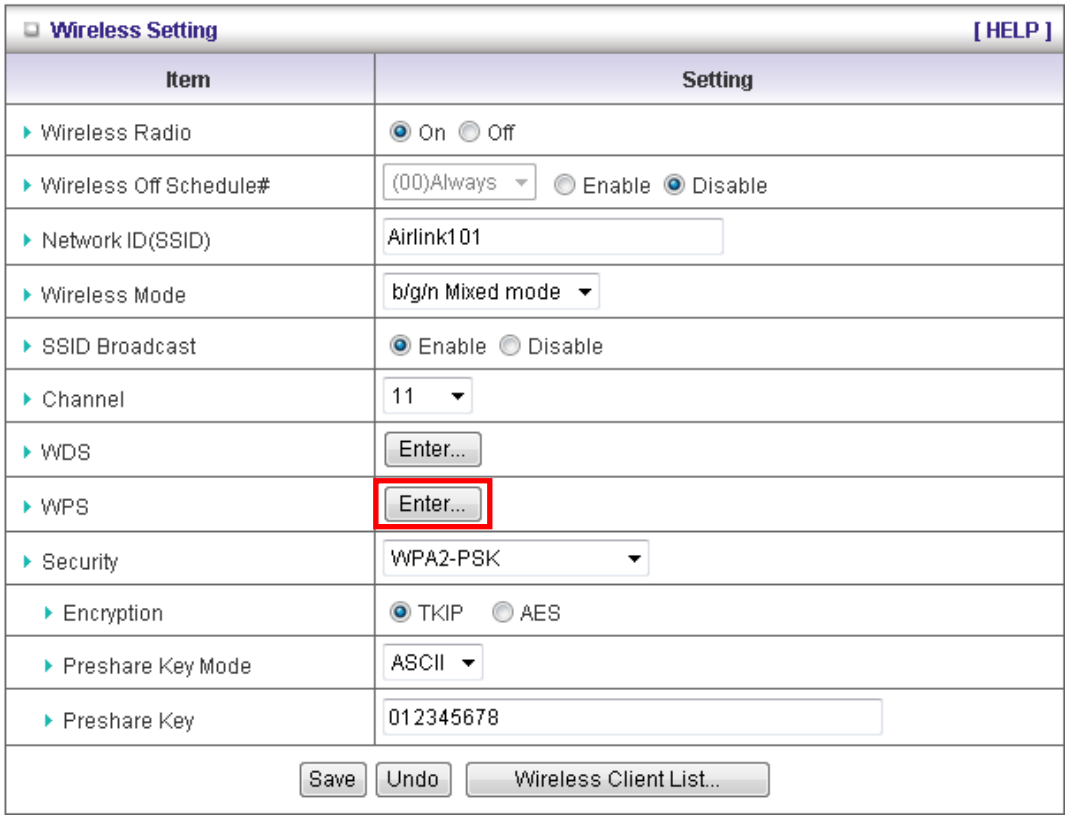

Wi-Fi Protected Setup - PBC method
Wi-Fi Protected Setup - PBC method
If there is more than one AP on the PBC mode,there will be [Session Overlap].Please use PIN method or wait for a while and use PBC method again.
Status : Initial WPS ...
Complete :
Push Button Config (PBC)
Cancel

**Step 3** Within the following 1 minute, push the Easy Setup Button on the Router and hold for less than 1 second. The wireless LED will start blinking quickly.

**Step 4** The Router will now start the handshake with the wireless adapter, which will take about 30 seconds. When you see the window similar to the below one, the connection has been established.



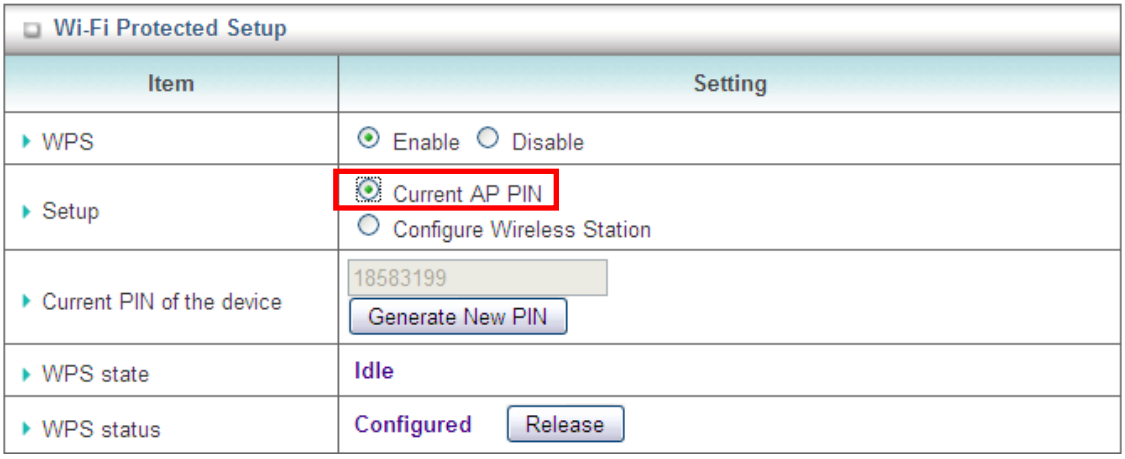
To configure the WPS™ settings of the router, go to **Advanced > Basic Setting > Wireless**, and click on **WPS "Enter"** button.



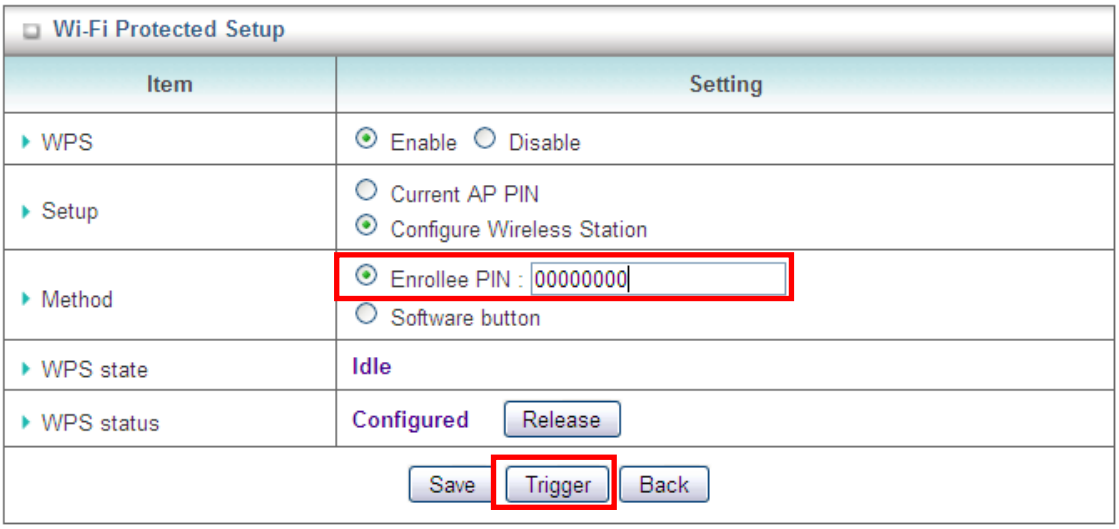

There are two methods to activate WPS™ with web configuration utility: PIN and PBC.

1) PIN (Personal Identification Number)

You can check "Current AP PIN" and enter the numbers generated by this router displaying in "Current PIN of the device" to the wireless client.

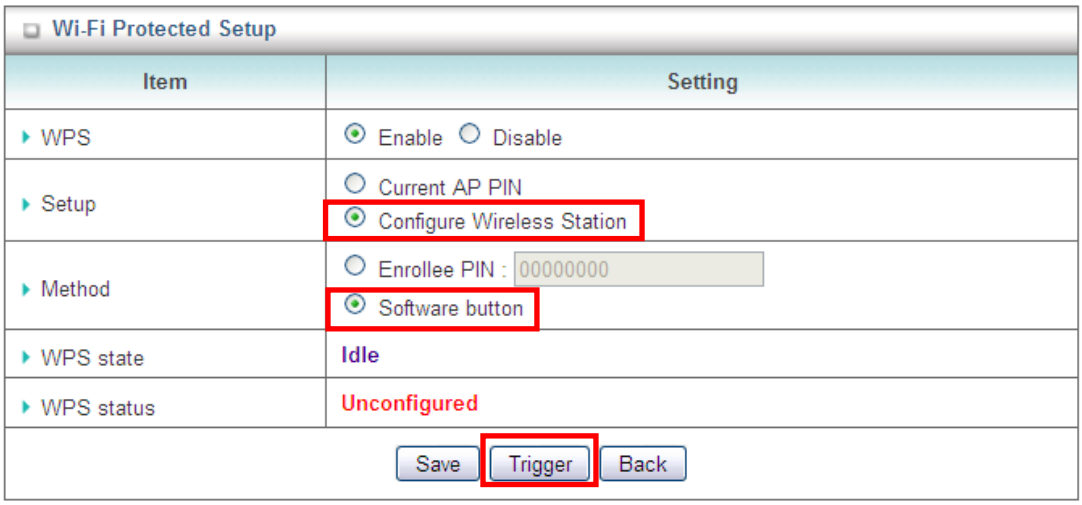


Or, you can check “Configure Wireless Station”, and enter the PIN generated by the wireless client into **Enrollee PIN**, and then click **Trigger** button to start WPS™.




2) PBC (Push Button Configuration)

You can choose to press the hardware Easy Setup Button on the front panel of the router, or select Configure Wireless Station, Software button, and click **Trigger** button to start WPS™.

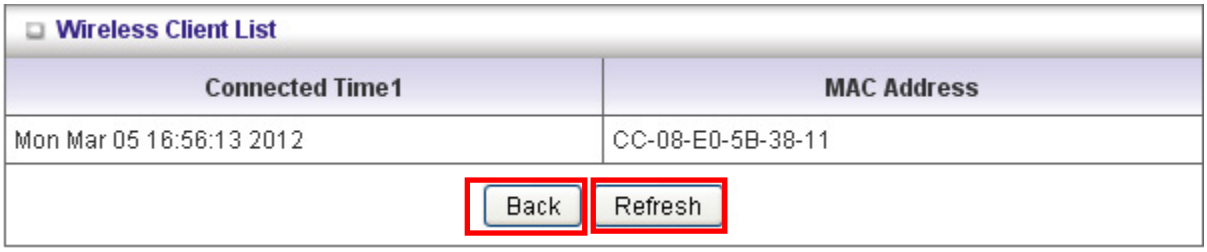


| Parameters | Description |
|---|---|
| **WPS** | Select to Enable or Disable WPS™ function. |
| **WPS State** | It displays “Idle” when there is no WPS session going on, “Processing” when WPS™ is in progress, or “Complete” when WPS™ is finished. |
| **WPS Status** | It displays “Configured” if WPS™ setup is successful, or “Unconfigured” if WPS™ setup fails. |

Click **Save** after you’ve finished all settings.

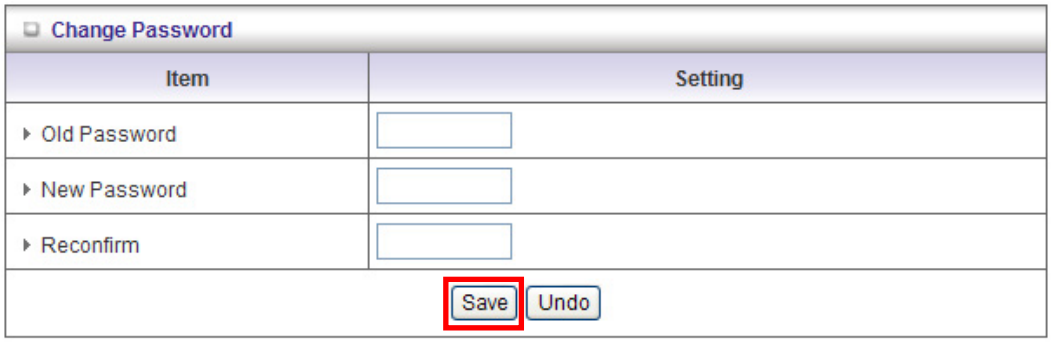
### *3.1.3.3 Wireless Client List*

This table displays the wireless clients that are currently associated to the router. You can click **Back** to go back to the Wireless page, or click **Refresh** to refresh the list.



### *3.1.4 Change Password*

You can change the password required to log into the Router's web configuration utility. The default password is "admin". It is suggested to change the administrator's default password as soon as you start to use the Router, and store it in a safe place. The password consists of 0 to 9 alphanumeric characters, and is case sensitive

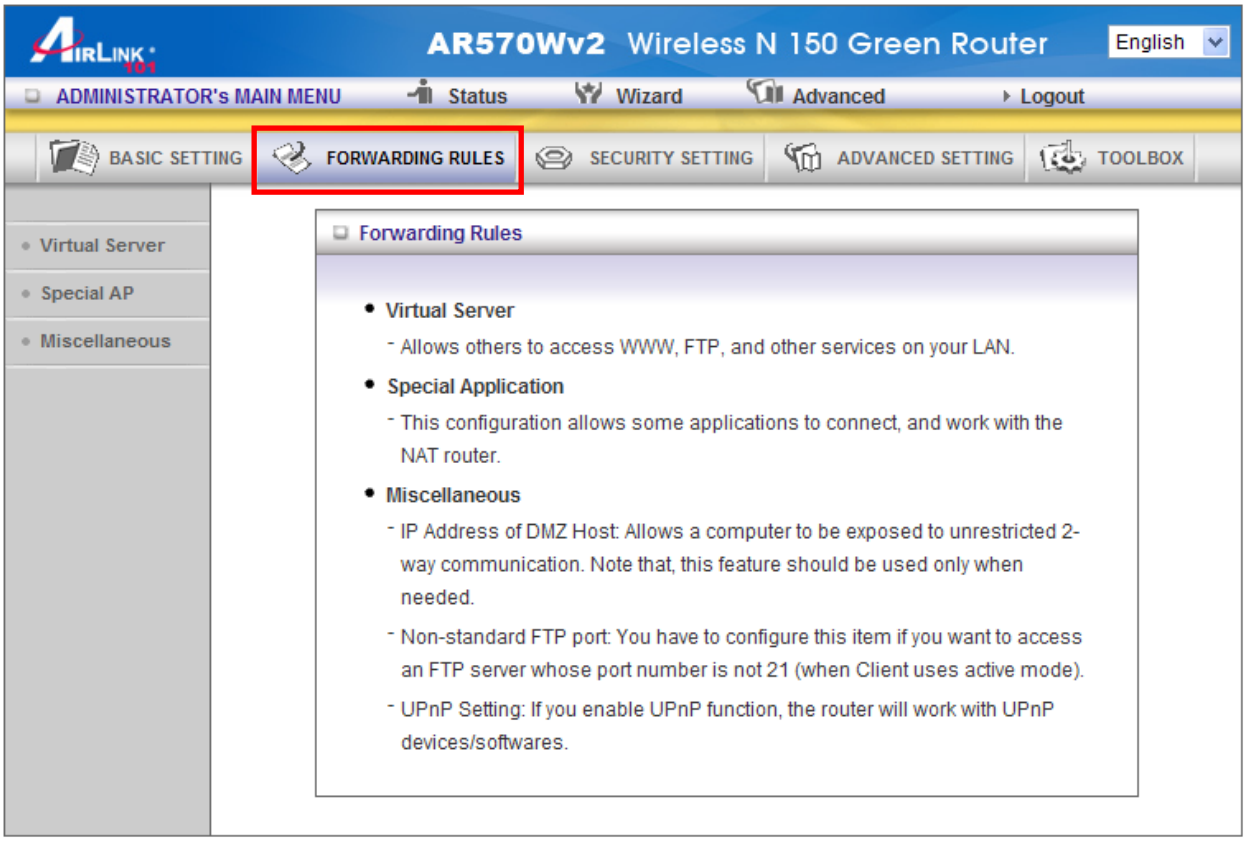



| Parameters | Description |
|---|---|
| **Old Password** | Enter the current password of the router. |
| **New Password** | Enter the new password. |
| **Reconfirm** | Enter the new password again for verification purposes.<br><br>**Note**: If you forget your password, you'll have to reset the router to the factory default (the default password is 'admin') by pressing the Reset button on the back panel of the router and hold for 4 seconds. |

Click **Save** after you've finished all settings.

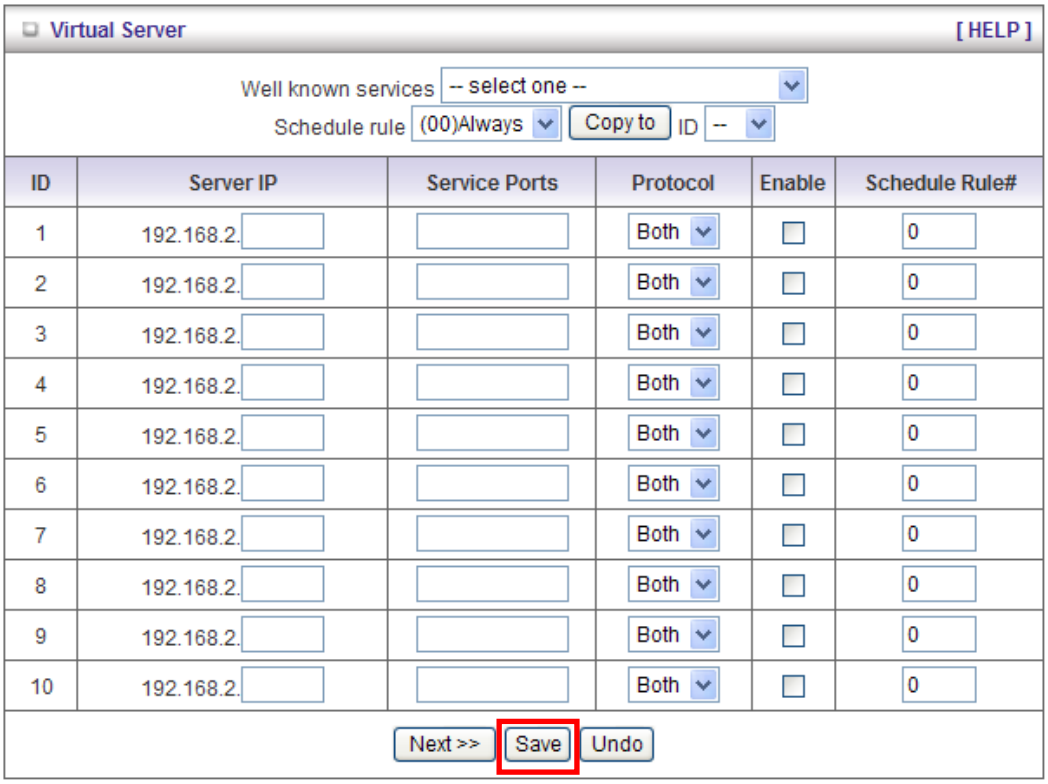
## *3.2 Forwarding Rules*

You can configure Virtual Server, Special Application and Miscellaneous settings in this page.


AR570Wv2 Wireless N 150 Green Router
English
ADMINISTRATOR's MAIN MENU
Status
Wizard
Advanced
Logout
BASIC SETTING
FORWARDING RULES
SECURITY SETTING
ADVANCED SETTING
TOOLBOX
Virtual Server
Special AP
Miscellaneous
Forwarding Rules
Virtual Server
- Allows others to access WWW, FTP, and other services on your LAN.
Special Application
- This configuration allows some applications to connect, and work with the NAT router.
Miscellaneous
- IP Address of DMZ Host: Allows a computer to be exposed to unrestricted 2-way communication. Note that, this feature should be used only when needed.
- Non-standard FTP port: You have to configure this item if you want to access an FTP server whose port number is not 21 (when Client uses active mode).
- UPnP Setting: If you enable UPnP function, the router will work with UPnP devices/softwares.

### *3.2.1 Virtual Server*

If you want to host a HTTP/FTP server or allow remote access to your IP camera on the LAN from the Internet, you must set up port forwarding rules on the router in order to direct incoming traffic to the server or IP Camera. This page allows you to set up to 20 port forwarding rules for the specified applications.



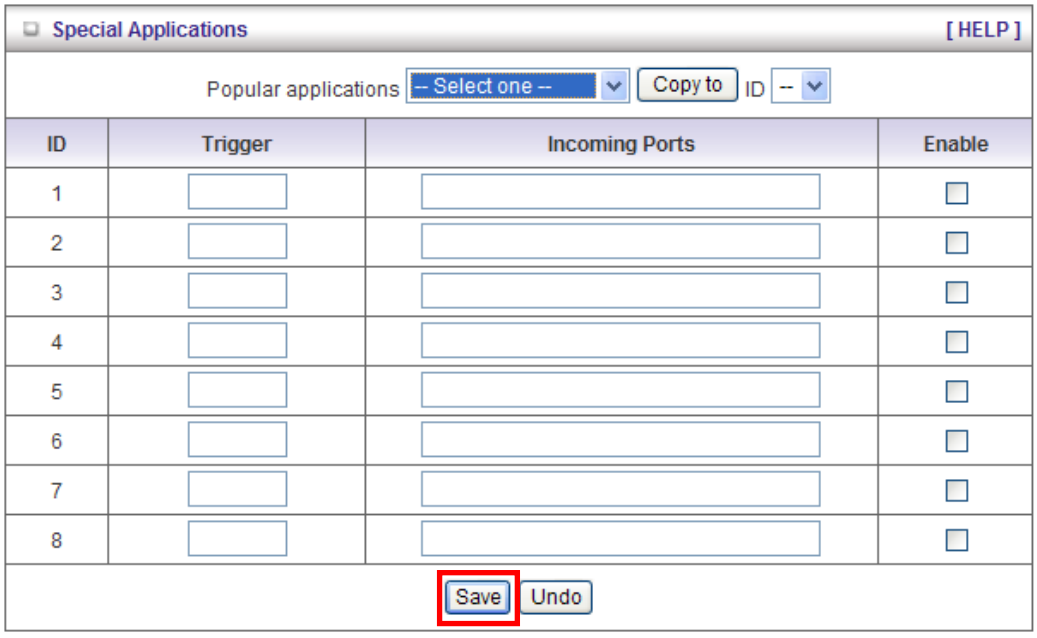

| Parameter | Description |
|---|---|
| **Well known services** | You can select a pre-defined service from the list of well known services, select a schedule rule, and the ID you wish to fill the settings in. Click **Copy to** and the settings you selected will be filled into the specific ID. |
| **Server IP** | This is the private IP address of the server behind the NAT firewall. Note: You must give your LAN client a fixed/static IP address for Virtual Server to work properly. |
| **Service Ports** | The range of ports to be forwarded to the Server IP. You can fill in a single port, such as 21, 80 or a range, such as 2000-2999. |
| **Protocol** | This is the protocol type to be forwarded. You can choose to forward “TCP” or “UDP” packets only or select “Both” to forward both “TCP” and “UDP” packets. |

| | |
|---|---|
| **Enable** | Check to enable this forwarding rule. |
| **Schedule Rule#** | Enter a Schedule Rule number to enable the forwarding rule only within the desired time frame. Please refer to ***3.4.7 Schedule Rule*** for detailed setting instructions. You can set 0 to enable the forwarding rule always. If you assign a schedule rule (for example, 9am to 5pm) to ID#1, users are only allowed to access the FTP server from 9am to 5pm. |
| **Next>> / Previous<<** | Access the next/previous 10 port forwarding rules. |

Click **Save** after you've finished all settings.

### *3.2.2 Special Applications*

Some applications require multiple connections, such as Internet gaming, video conferencing, Internet telephony and others. These applications cannot work when Network Address Translation (NAT) is enabled. If you need to run applications that require multiple connections, specify the port normally associated with an application in the "Trigger" field, and then enter the public ports associated with the trigger port to open them for inbound traffic. The range of the Trigger port is from 1 to 65535.

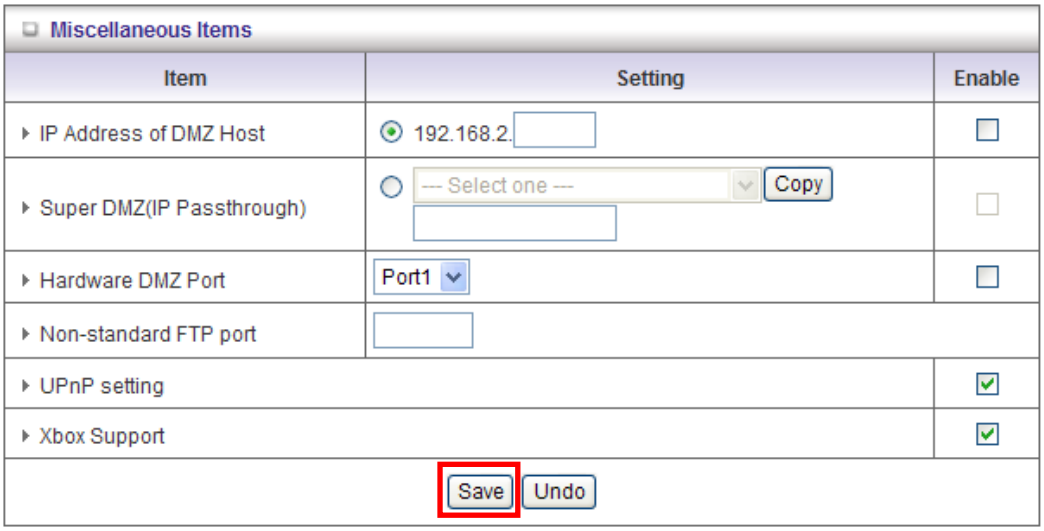


| Parameter | Description |
|---|---|
| **Popular applications** | You can select a pre-defined application from the list of Popular applications, and the ID you wish to fill the setting in. Click **Copy to** and the setting you selected will be filled into the specific ID. |
| **Trigger** | Enter an outbound port number assigned by the application. |
| **Incoming Ports** | When the trigger packet is detected, the inbound packets to the specified port numbers are allowed to pass through the NAT firewall, type in a range of incoming ports to be triggered, for instance, “5000-5300” or “9091, 9093-9100”. It depends on the special application’s requirement. |
| **Enable** | Check to enable this Special Application rule. |

*Note: Only one PC can use each Special Application tunnel at same time.*
*If the mechanism of Special Applications fails to make an application work, try setting your computer as the **DMZ** host instead, please refer to Section **3.2.3 Miscellaneous** for details .*
Click **Save** after you’ve finished all settings.

### *3.2.3 Miscellaneous*

If you have a local client PC that cannot run an Internet application (e.g. Games) properly from behind the NAT firewall, then you can open the client up to unrestricted two-way Internet access by defining a DMZ Host. The DMZ function allows you to re-direct all packets going from your WAN port IP address to a particular IP address in your LAN. You can configure DMZ in this page, as well as UPnP and other settings.

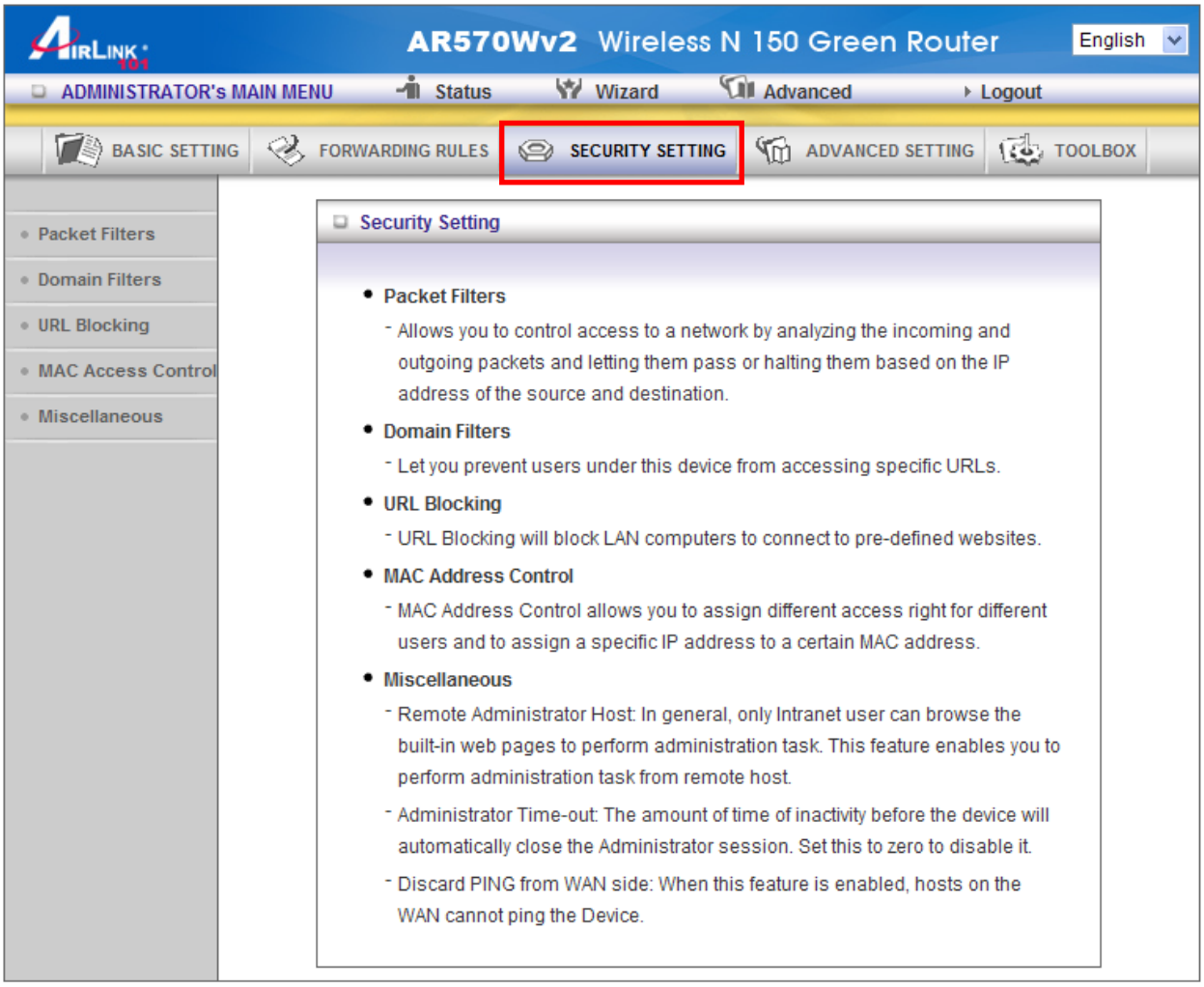


| Parameter | Description |
|---|---|
| **IP Address of DMZ Host** | Enter the local IP address that you wish to open DMZ. If the application still doesn't work on your computer after you open DMZ, you can try to enable Super DMZ for that computer. |
| **Super DMZ (IP Passthrough)** | Select Super DMZ when your computer or server on the Local Area Network needs to allow access from the Internet with a real public IP address. With IP Passthrough configured, all IP traffic, not just TCP/UDP, is forwarded back to the host computer. This can be necessary with certain types of software that do not function reliably through Network Address Translation. |
| **Hardware DMZ Port** | This feature allows the device to get Global IP from ISP directly. Some device like STB or MOD works via assigned Port. |
| **Non-standard FTP Port** | Enter the FTP port number if the FTP server's port you try to access is not 21. |
| **UPnP** | Check the Enable box to enable UPnP feature. After you enable the UPnP feature, all client systems that support UPnP, like Windows 7, can discover this router automatically. |
| **Xbox Support** | Xbox is a video game console produced by Microsoft Corporation. Check the Enable box to enable Xbox Support feature |

Click **Save** after you've finished all settings.

## *3.3 Security Setting*

You can configure Internet access rules for your local computers based on Packet Filters, Domain Filters, URL Blocking, MAC Access Control and Miscellaneous settings in this page.

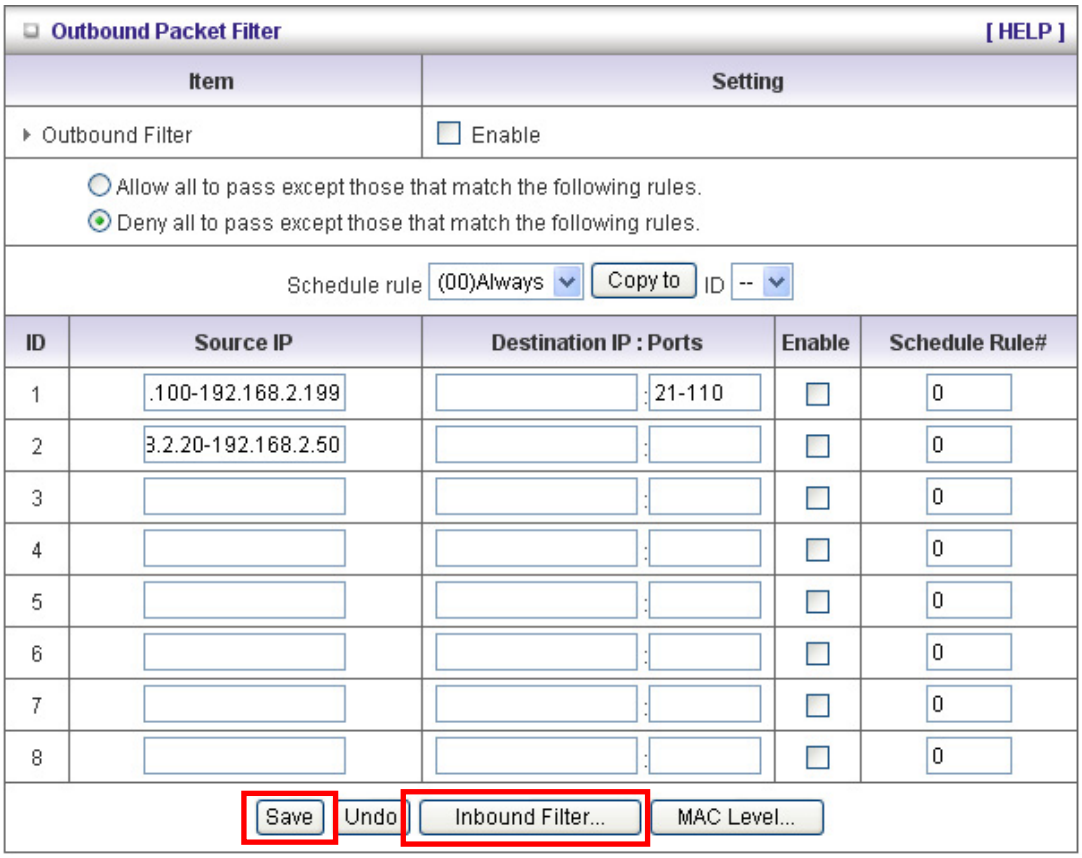

AR570Wv2 Wireless N 150 Green Router
English
ADMINISTRATOR's MAIN MENU
Status
Wizard
Advanced
Logout
BASIC SETTING
FORWARDING RULES
SECURITY SETTING
ADVANCED SETTING
TOOLBOX
Packet Filters
Domain Filters
URL Blocking
MAC Access Control
Miscellaneous
Security Setting
Packet Filters
- Allows you to control access to a network by analyzing the incoming and outgoing packets and letting them pass or halting them based on the IP address of the source and destination.
Domain Filters
- Let you prevent users under this device from accessing specific URLs.
URL Blocking
- URL Blocking will block LAN computers to connect to pre-defined websites.
MAC Address Control
- MAC Address Control allows you to assign different access right for different users and to assign a specific IP address to a certain MAC address.
Miscellaneous
- Remote Administrator Host: In general, only Intranet user can browse the built-in web pages to perform administration task. This feature enables you to perform administration task from remote host.
- Administrator Time-out: The amount of time of inactivity before the device will automatically close the Administrator session. Set this to zero to disable it.
- Discard PING from WAN side: When this feature is enabled, hosts on the WAN cannot ping the Device.

### *3.3.1 Packet Filters*

Packet Filters allows you to control access to a network by analyzing the incoming and outgoing packets and letting them pass or halting them based on the IP address of the source and destination. Outbound Filter applies to all outbound packets but Inbound Filter applies only to packets that are destined to Virtual Servers or DMZ host.

If you want to restrict users from accessing certain Internet applications/services (e.g. Internet websites, email, FTP etc.) by their IP addresses, you can set up the filtering rules here. Packet filters can be helpful in securing or restricting your local network.

Example:




Computers with IP addresses between 192.168.2.20 to 192.168.2.50 have no restriction on accessing any network services, while other computers are all blocked. Meanwhile, computers with IP addresses between 192.168.2.100 to 192.168.2.199 are allowed to send Email (port 25), receive E-mail (port 110), and browse Internet (port 80).

For each rule, you can define:

- Source IP address
- Destination IP address
- Destination port address
- Protocol: TCP or UDP or both.

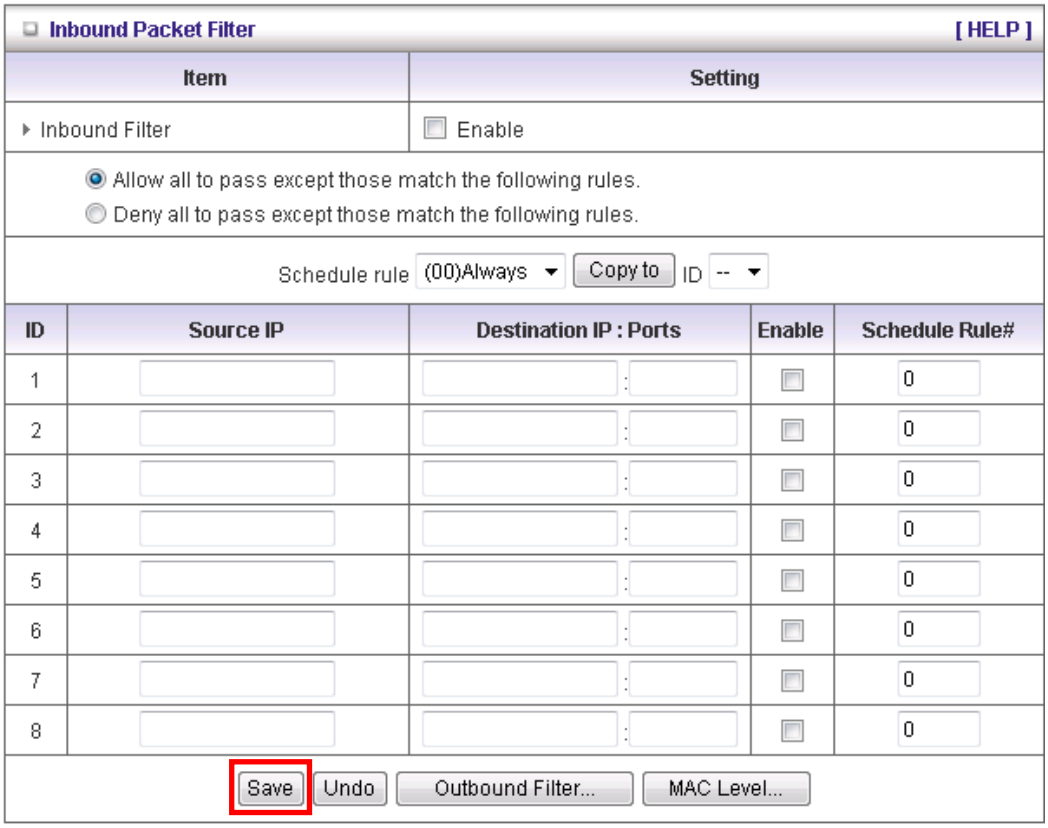
| Parameters | Description |
|---|---|
| **Outbound Packet Filter** | Check/uncheck Enable to enable/disable the Packet Filtering. Outbound Filter applies to all outbound packets but Inbound Filter applies only to packets that are destined to Virtual Servers or DMZ host. |
| **Allow / Deny all to pass except those that match the following rules** | Please select “Allow” or “Deny” to decide the behavior of packet filtering table. If you select allow, all traffic will be allowed except that the Source IP addresses listed in filtering table will be rejected to connect to the destination IP addresses and ports. If you select deny, all traffic will be denied except that the Source IP address listed in filtering table will be allowed to connect to the destination IP addresses and ports. |
| **Source IP** | Please input the client’s IP address you wish to apply the filtering rule. You can input a single IP address (192.168.2.10) or a range of IP addresses (192.168.2.10-192.168.2.50). Leaving this field blank indicates all IP addresses. |
| **Destination IP** | Please input the Destination IP address (i.e. an FTP site, Email server, etc.) you wish to apply the filtering. You can input a single IP address (192.168.2.10) or a range of IP addresses (192.168.2.10-192.168.2.50), leaving this field blank means all IP addresses. |
| **Port** | Please input the port number here. You can define a single port (80) or a range of ports (1000-1999). Add prefix "T" or "U" to specify TCP or UDP protocol, for example, T80, U53, U2000-2999. No prefix indicates both TCP and UDP are defined. Leaving this field blank indicates all ports. |
| **Enable** | Check/uncheck Enable to enable/disable each Packet Filtering rule. |
| **Schedule Rule#** | Enter a Schedule Rule number to activate the filtering rule only within the desired time frame. Please refer to ***3.4.7 Schedule*** |

| | |
|---|---|
| | ***Rule*** for detailed setting instructions. Set 0 to let the filtering rule always take effect. |
| **Inbound Filter** | Click Inbound Filter button to go to Inbound Packet Filter settings. |

---

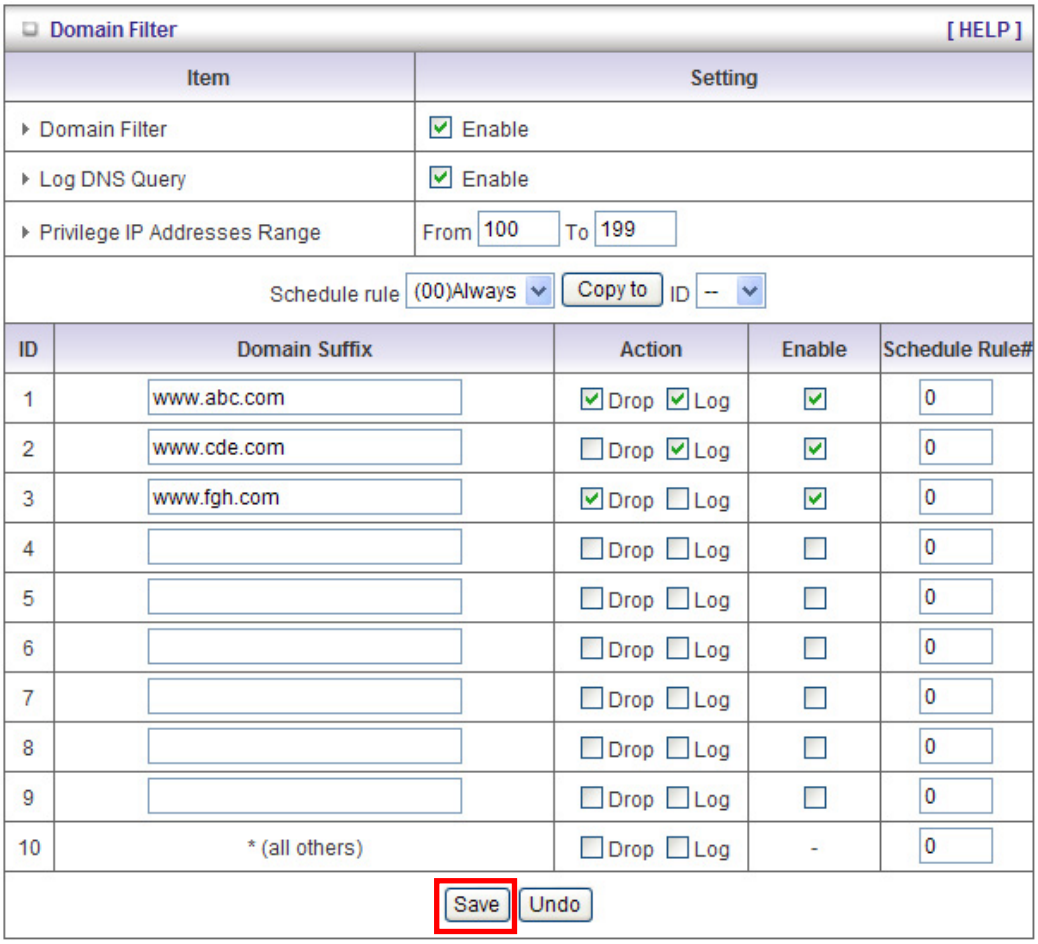
Click **Save** after you've finished all settings.

Click **Inbound Filter** to configure inbound traffic filters.



### *3.3.2 Domain Filters*

You can block users from accessing specific domains on the internet. This feature can help parents to manage the Internet usage for their children (i.e. Parental Control).




| Parameter | Description |
|---|---|
| **Domain Filter** | Check/Uncheck Enable box to enable/disable Domain Filter. |
| **Log DNS Query** | Check/Uncheck Enable box to enable/disable logging DNS Query. |
| **Privilege IP Address Range** | Enter a host IP address range that has privilege to access any network service without restriction. For example, From 10 to 20. |
| **Domain Suffix** | You can enter a domain suffix of URL to be restricted, for example, ".com" or "xxx.com". |

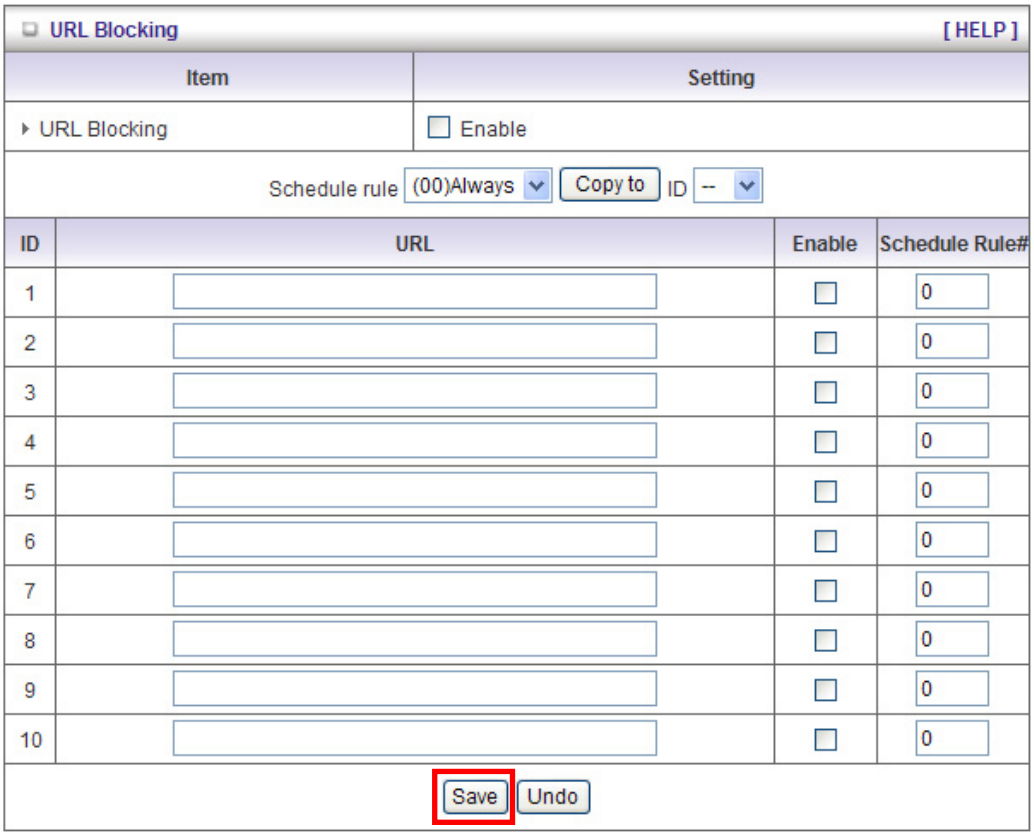
| | |
|---|---|
| **Action** | Check **Drop** or **Log** or both to determine the actions of router, when user attempts to access the restricted domain. According to the settings in the screenshot above:<br>Link request to www.abc.com will be dropped and recorded in log file.<br>Link request to www.cde.com will be allowed but will be recorded in log file.<br>Link request to www.fgh.com will be dropped and will not be recorded in log file.<br>However, IP Address from 192.168.2.100 to 192.168.2.199 will not be restricted. |
| **Enable** | Check/Uncheck Enable box to enable/disable each rule individually. |
| **Schedule Rule#** | Enter a Schedule Rule number to activate the filtering rule only within the desired time frame. Please refer to ***3.4.7 Schedule Rule*** for detailed setting instructions. Set 0 to let the filtering rule always take effect. |

---

Click **Save** after you've finished all settings.

### *3.3.3 URL Blocking*

You can block access to certain websites or web contents from local PCs by entering a full URL address or just keywords. The major difference between “Domain Filter” and “URL Blocking” is that Domain Filter requires user to input a suffix (like .com or .org, etc), while URL Blocking requires user to input a **keyword** only. In other words, Domain Filter can block specific websites, while URL Blocking can block any website that contains the specific keyword. This feature can also help parents to manage the Internet usage for their children (i.e. Parental Control).



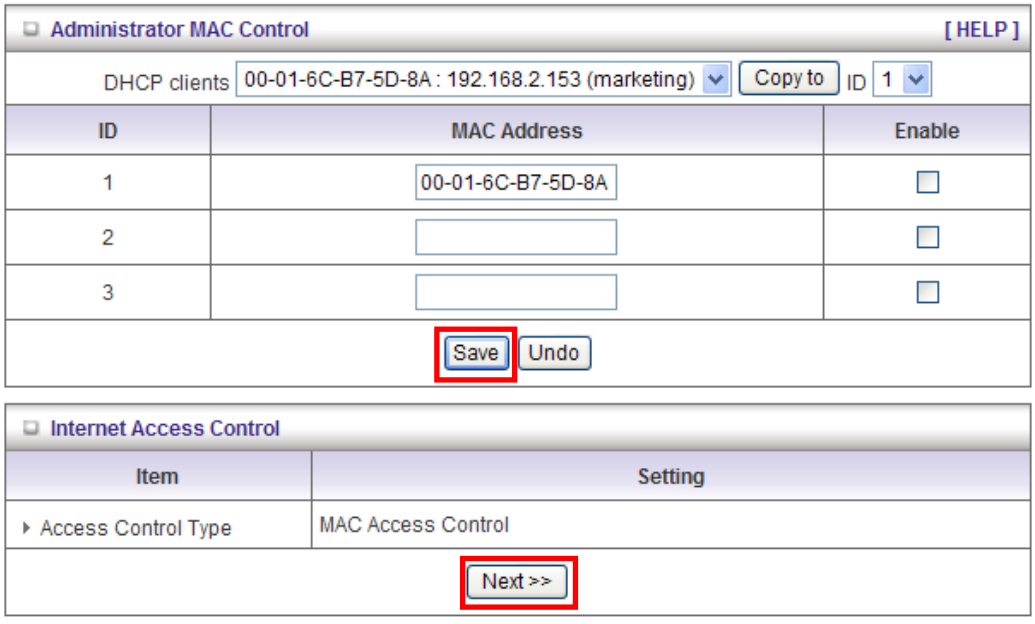

| Parameter | Description |
|---|---|
| **URL Blocking** | Check/Uncheck Enable box to enable/disable URL Blocking. |
| **URL** | You can enter the full URL address of a website or any **keyword** you want to block, for example “XXX”. |
| **Enable** | Check/Uncheck Enable box to enable/disable each URL |

| | |
|---|---|
| | individually. |
| **Schedule Rule#** | Enter a Schedule Rule number to activate the filtering rule only within the desired time frame. Please refer to ***3.4.7 Schedule Rule*** for detailed setting instructions. Set 0 to let the filtering rule always take effect. |

Click **Save** after you've finished all settings.

### *3.3.4 MAC Access Control*

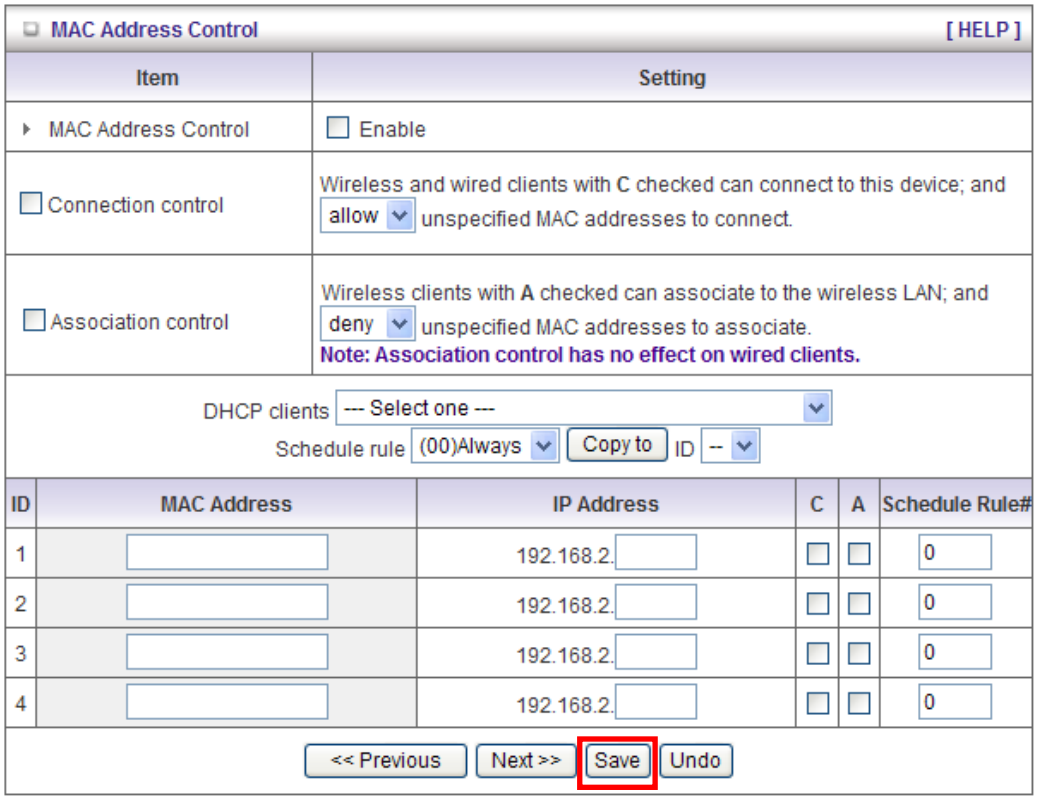
MAC Access Control will help you to prevent unauthorized users from connecting to your wireless router. Only those network devices with MAC addresses you specified here are allowed to access your wireless router. You can utilize this function with other security measures described in previous sections together to enhance the safety of your wireless network.




Before you configure any MAC control settings, you can set up to 3 administrative computers that will not be restricted by MAC Control rules.

In the **Administrator MAC Control** section, select a DHCP client computer from the drop-down list, select an ID, and click “Copy to”. The MAC address of the computer you selected will be automatically filled into the specific ID. Make sure the Enable box is checked. Click **Save** after you’ve finished all settings.

In the **Internet Access Control** Section, click **Next>>** for detailed MAC Access Control configuration.



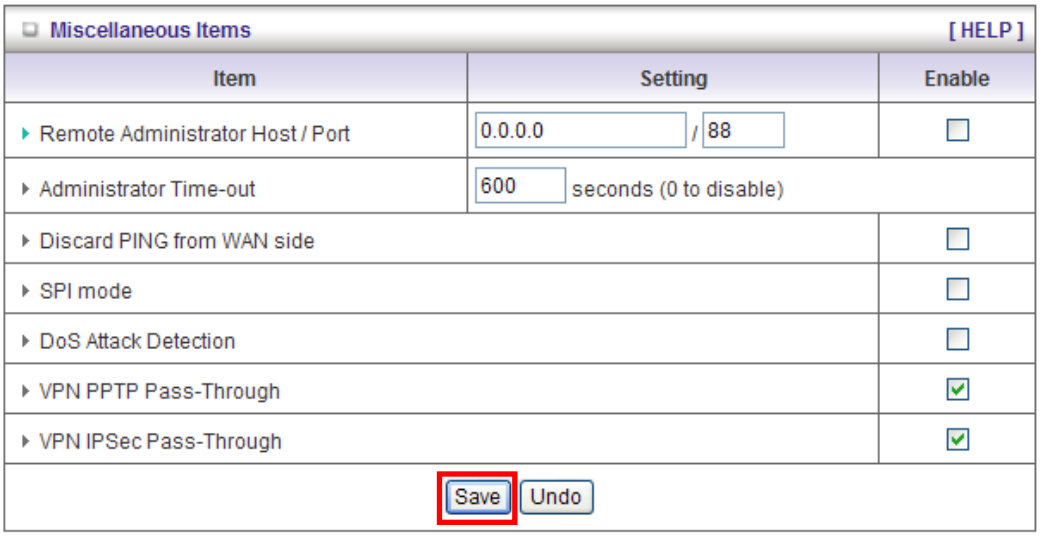

| Parameters | Description |
|---|---|
| **MAC Access Control** | Check **Enable** box to enable the MAC filtering function. All settings in this page will take effect only when **Enable** is checked. |
| **Connection Control** | Check this box to enable the rule that wireless or wired clients whose MAC addresses are in the table can connect to the router. Choose "allow" or "deny" to determine whether the router allows or denies connection from other clients whose MAC addresses are not in the table. |
| **Association Control** | Check this box to enable the rule that only the wireless clients whose MAC addresses are in the table can associate to the |

| | |
|---|---|
| | wireless LAN. If a client is denied to associate to the wireless LAN, it means it cannot send or receive any data via this router wirelessly. Choose "allow" or "deny" to determine if the router allows or denies wireless association from clients whose MAC addresses are not in the table. |
| **DHCP Clients** | Select a DHCP client from the drop-down list. Select an ID number and click **Copy To**. The client's MAC address will be copied to the ID you selected; you do not need to enter it manually. |
| **MAC Address** | Input the MAC address of your computer / network device. |
| **C** | Check this box to allow the wired/wireless client to connect to the router. |
| **A** | Check this box to allow the wireless client to associate to the wireless network. |
| **Previous / Next** | You can set up to 32 MAC control rules for this router. Click **Previous** or **Next** to reach the previous or next 4 rules. |
| **Schedule Rule#** | Enter a Schedule Rule number to activate the filtering rule only within the desired time frame. Please refer to ***3.4.7 Schedule Rule*** for detailed setting instructions. Set 0 to let the filtering rule always take effect. |

---

Click **Save** after you've finished all settings.

### *3.3.5 Miscellaneous*




| Parameters | Description |
|---|---|
| **Remote Administrator Host/ Port** | This feature enables you to perform administration task from remote host. If this feature is enabled, only the specified IP address can perform remote administration. Setting the specified IP address as 0.0.0.0 indicates any host can connect with this product to perform administration task. You can specify a port number for remote administrator; the default value is 88. |
| **Administrator Time-out** | The system will log out the administrator after no activity for a period of time. You may set the time-out period to zero to disable this feature. |
| **Discard PING from WAN side** | Check this box to enable Discard PING from WAN side. When you enable this feature, your router will not respond to a “ping” request from any host on the WAN side. |
| **SPI Mode** | Stateful Packet Inspection mode is a firewall that keeps track of the state of network connections (such as TCP, UDP communication) travelling across it. The firewall is programmed to distinguish legitimate packets for different types of connections. Only packets matching a known connection state will be allowed by the firewall; others will be rejected. |

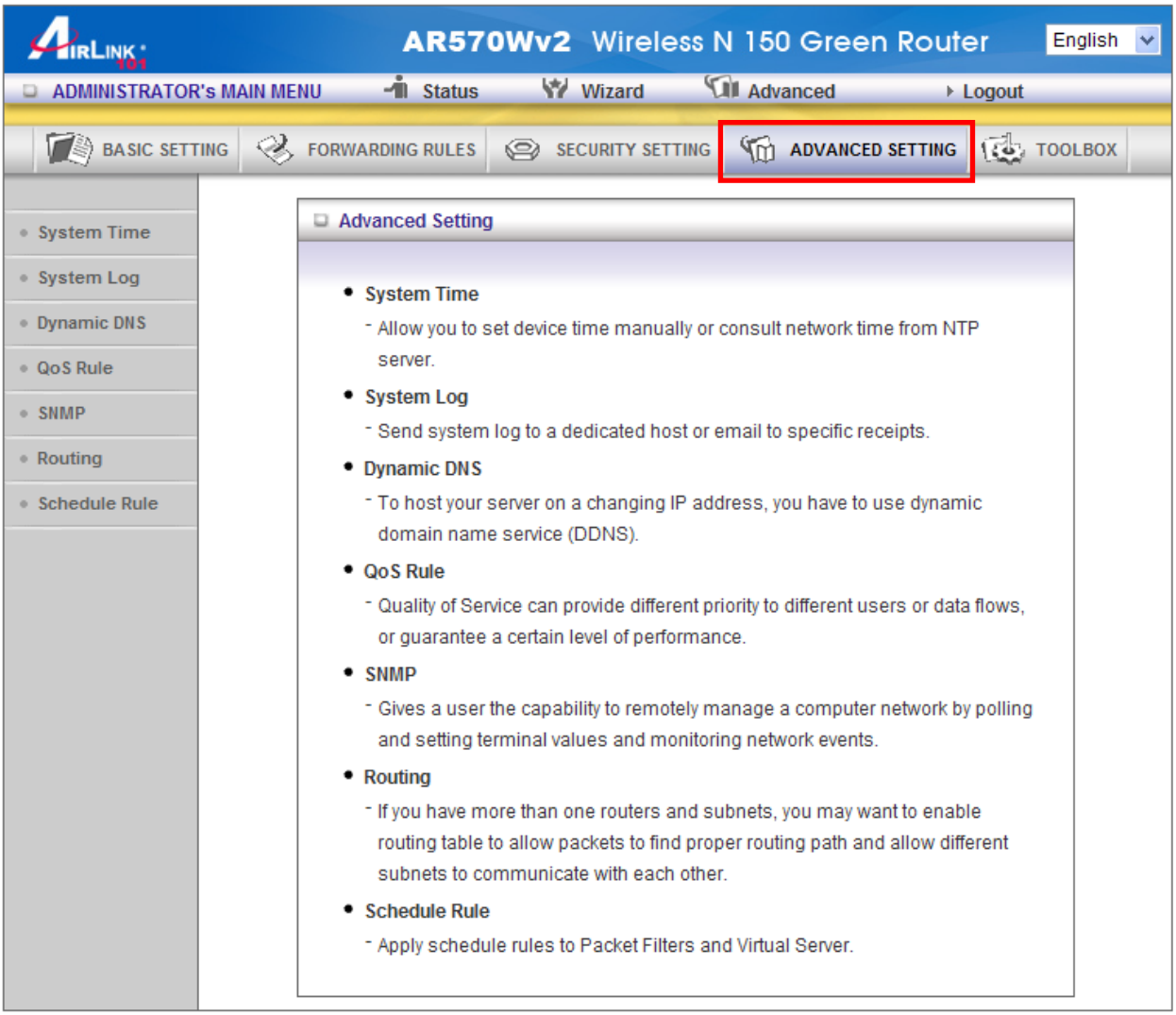
| | |
|---|---|
| **DoS Attack Detection** | Check this box to enable the DoS Attack Detection. Router will block the DoS once it is detected. Denial of Service (DoS) is a common attack measure, by transmitting a great amount of data or requests to your Internet IP address and server, so that the Internet connection will become very slow, and server may stop responding because it is not capable to handle too much traffic. |
| **VPN PPTP Pass-Through** | Check this box and the router will enable PPTP packets to pass through the router for VPN connection |
| **VPN IPSec Pass-Through** | Check this box and the router will enable IPsec packets to pass through the router for VPN connection. |

---

Click **Save** after you've finished all settings.

## *3.4 Advanced Setting*

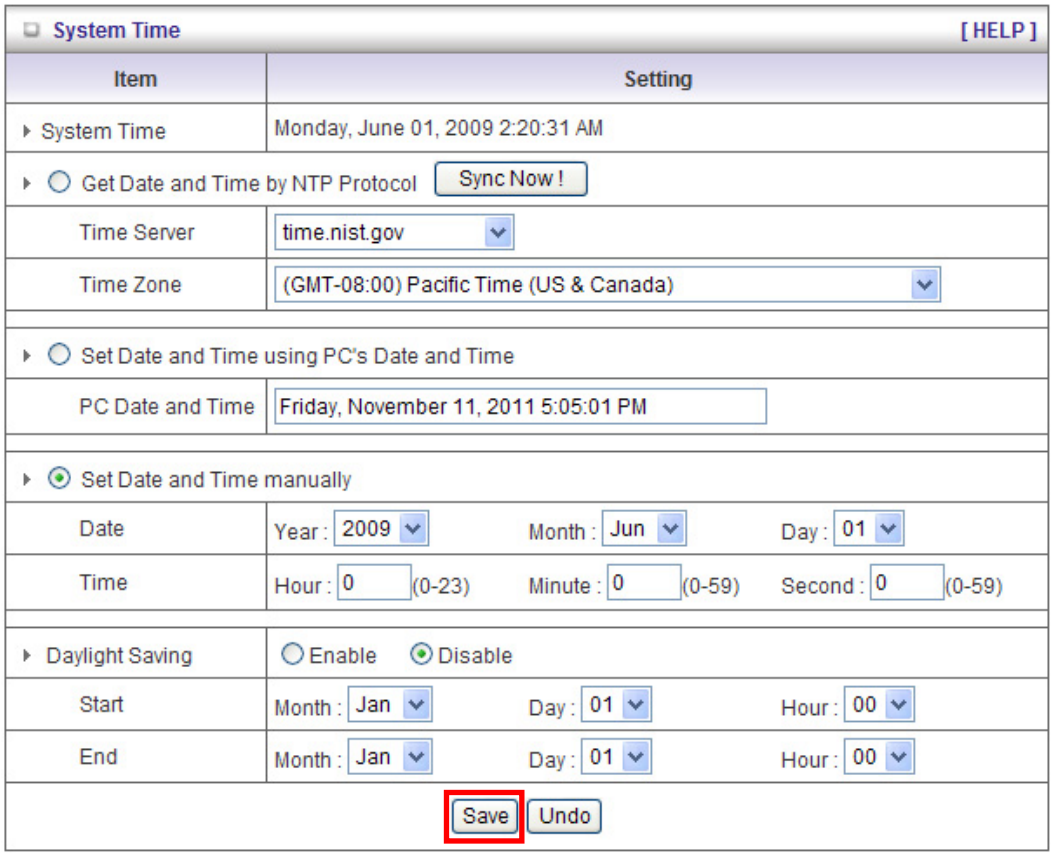
This page allows you to set up System Time, System Log, Dynamic DNS, QoS Rule, SNMP, Routing, and Schedule Rule.


AR570Wv2 Wireless N 150 Green Router
English
ADMINISTRATOR's MAIN MENU
Status
Wizard
Advanced
Logout
BASIC SETTING
FORWARDING RULES
SECURITY SETTING
ADVANCED SETTING
TOOLBOX
System Time
System Log
Dynamic DNS
QoS Rule
SNMP
Routing
Schedule Rule
Advanced Setting
System Time
- Allow you to set device time manually or consult network time from NTP server.
System Log
- Send system log to a dedicated host or email to specific receipts.
Dynamic DNS
- To host your server on a changing IP address, you have to use dynamic domain name service (DDNS).
QoS Rule
- Quality of Service can provide different priority to different users or data flows, or guarantee a certain level of performance.
SNMP
- Gives a user the capability to remotely manage a computer network by polling and setting terminal values and monitoring network events.
Routing
- If you have more than one routers and subnets, you may want to enable routing table to allow packets to find proper routing path and allow different subnets to communicate with each other.
Schedule Rule
- Apply schedule rules to Packet Filters and Virtual Server.

### *3.4.1 System Time*

To specify correct system time for your router is very important. It will affect the schedule rule and system logs. This router provides 3 ways to configure the system date and time:

1) Synchronize with time server. (The router must connect to the Internet.)
   > Select **Get Date and Time by NTP Protocol**
2) Synchronize with PC.
   > Select **Set Date and Time using PC's Date and Time**
3) Manually configure the time
   - Select **Set Date and Time manually**




| Parameter | Description |
|---|---|
| **System Time** | Displaying the current system time of router. |
| **Sync Now** | Click this button to synchronize the system time with the desired |

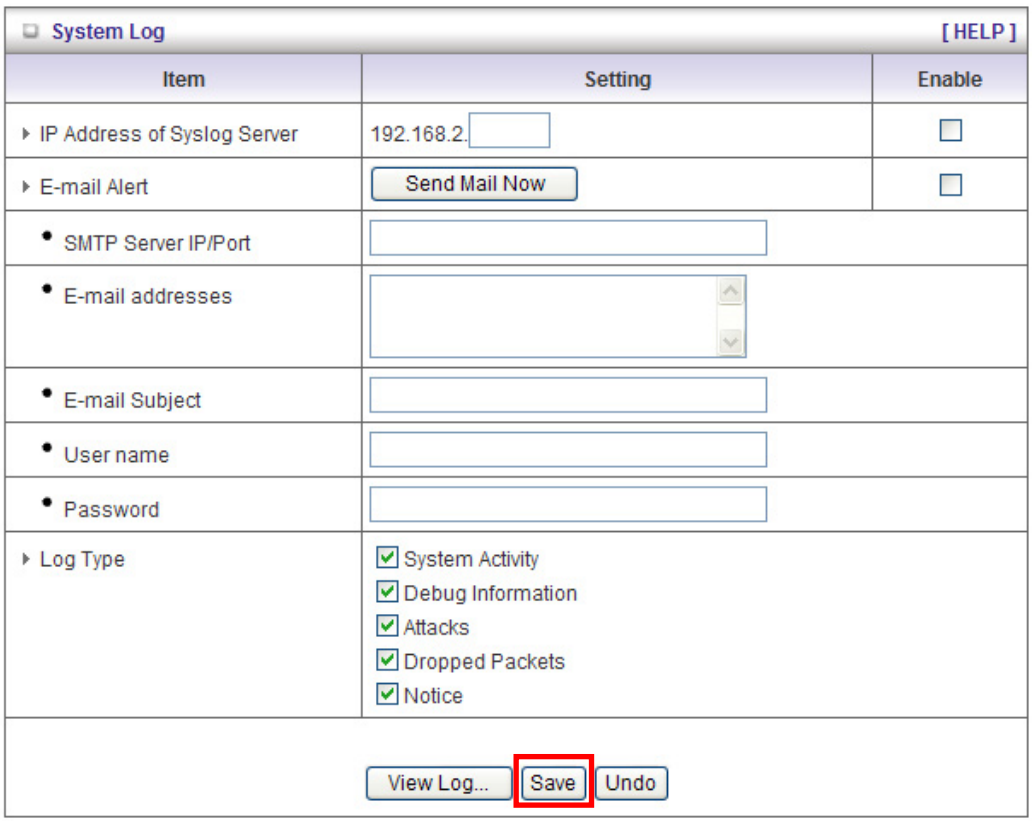
| | |
|---|---|
| | time server. (The router must be connected to the Internet to be able to synchronize time.) |
| **Time Server** | Select a time server here. |
| **Time Zone** | You can select your local time zone here. The router will synchronize time according to your time zone selection. |
| **PC Date and Time** | Select “Set Date and Time using PC’s Date and Time”, and router will automatically copy the date and time from your PC. |
| **Date / Time** | Select Year, Month, Day, Hour, Minute, and Second if you wish to set the system date and time manually. |
| **Daylight Saving** | Select Enable or Disable for daylight saving according to where you are located. |
| **Start / End** | If you enable daylight saving, please specify the first and last date of daylight saving time. |

---

Click **Save** after you’ve finished all settings.

### *3.4.2 System Log*

You can enable this function to log all important system events for your router. This page provides two methods to export system logs to specific destination by means of syslog (UDP) and SMTP (TCP).



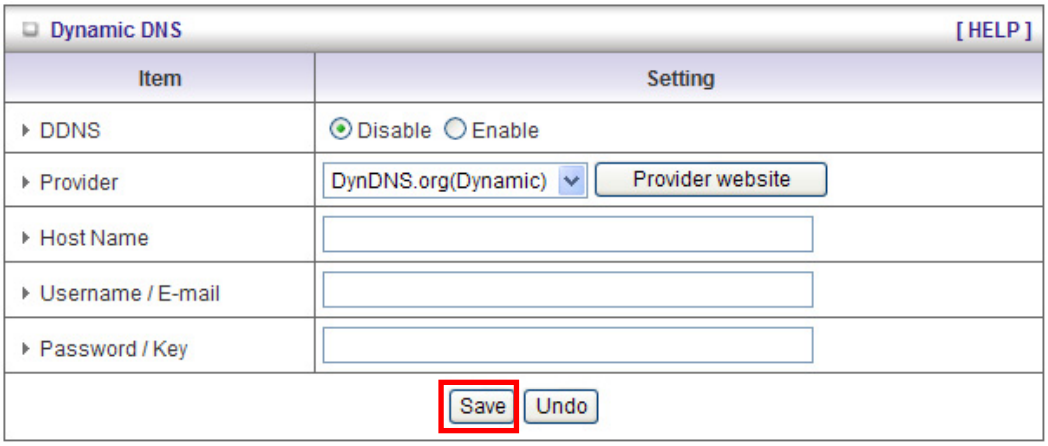

| Parameters | Description |
|---|---|
| **IP Address of Syslog Server** | Enter the host IP of destination where system log will be sent to. Check Enable box to enable this feature |
| **Email Alert** | Check Enable box if you want to enable Email Alert (send syslog via Email). Email Alert will work only if the router connects to Internet. |
| **Send Mail Now** | Click Send Mail Now to email system log to the account you set up. |
| **SMTP Server IP/Port** | Input the SMTP server IP and port, which are concatenated with |

| | |
|---|---|
| | '/'. If you do not specify port number, the default value is 25. For example, "mail.abc.com" or "192.168.1.100/25". |
| **Email Addresses** | Enter the Email addresses of the recipients who will receive these logs. You can assign more than 1 recipient by using ';' or ',' to separate these Email addresses. |
| **Email Subject** | You may input the subject of email alert here. This setting is optional. |
| **Username** | Input the user name of Sender's Email account. |
| **Password** | Input the password of Sender's Email account. |
| **Log Type** | Select the types of communication you wish to log. |
| **View Log** | Click View Log to view all system logs. |

---

Click **Save** after you've finished all settings.

### *3.4.3 Dynamic DNS*

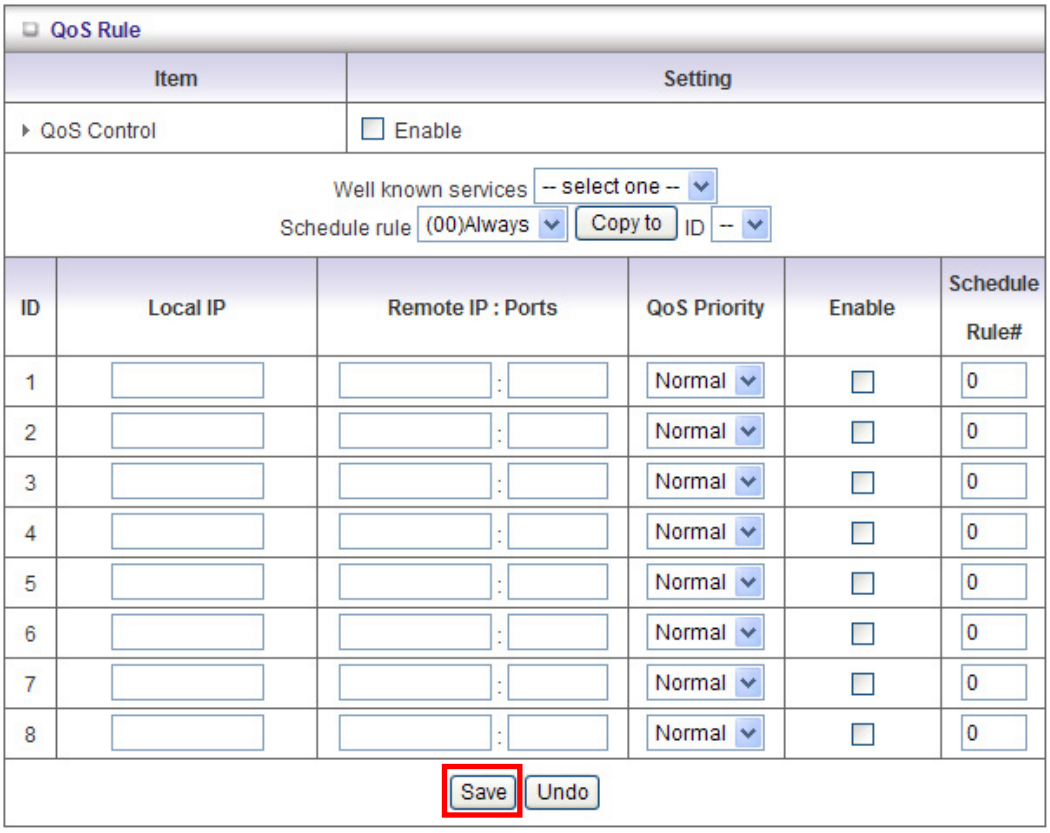



| Parameter | Description |
|---|---|
| **DDNS** | Select to Disable or Enable DDNS function. |
| **Provider** | A DDNS provider provides service for you to bind your IP (even private IP) with a certain Domain name. Choose a desired provider. |
| **Provider Website** | Click **Provider Website** to go to the selected DDNS provider's website. |
| **Host Name** | You can register a domain name at the DDNS provider's website. The full domain name is concatenated with host name (you specify) and a suffix (DDNS provider specifies). For example, ABChome.dyndns.org. |
| **Username / E-mail** | This field is required by DDNS provider to authenticate its users. Input user name you registered at the DDNS provider. |
| **Password / Key** | This field is required by DDNS provider to authenticate its users, too. Input password or key according to the DDNS provider you select. |

Click **Save** after you've finished all settings.

### *3.4.4 QoS Rule*

Quality of Service provides an efficient way for computers on the network to share the Internet bandwidth with a promised quality of Internet service. Without QoS, all computers and devices on the network will compete with one another to get Internet bandwidth, and some applications which require guaranteed bandwidth (like video streaming and network telephone) will be affected; therefore, an unpleasing result will occur, such as interruptions to video / audio streaming.




| Parameter | Description |
|---|---|
| **QoS Control** | Check Enable box to enable QoS function. |
| **Well known services** | Select a network service, a schedule rule and ID#, and click "**Copy to**". The settings you selected will be filled into the specific ID. |
| **Local IP** | Specify a local (source) IP address that will be affected by this |

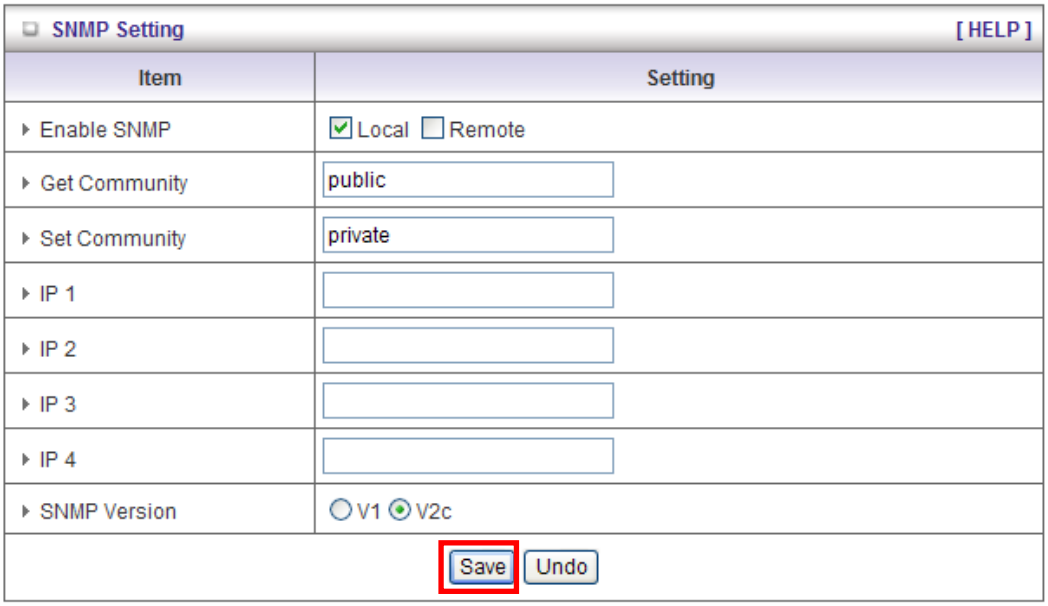
| | |
|---|---|
| | rule. |
| **Remote IP Address** | Specify a remote (destination) IP address that will be affected by this rule. |
| **Ports** | Please input the range of remote (destination) port number that will be affected by this rule. If you want to apply this rule on port 80 to 90, please input “80-90”; if you want to apply this rule on a single port, just input the port number, such as 80. If the remote (destination) IP address and /or port number is universal, just leave it blank. |
| **QoS Priority** | Assign High, Normal, or Low priority to the specific network client. |
| **Enable** | Check this box to enable individual QoS rule. |
| **Schedule Rule#** | Enter a Schedule Rule number to activate the QoS rule only within the desired time frame. Please refer to ***3.4.7 Schedule Rule*** for detailed setting instructions. |

---

Click **Save** after you’ve finished all settings.

### *3.4.5 SNMP*

Configure the router to allow administrative computers to control it through SNMP(Simple Network Management Protocol).



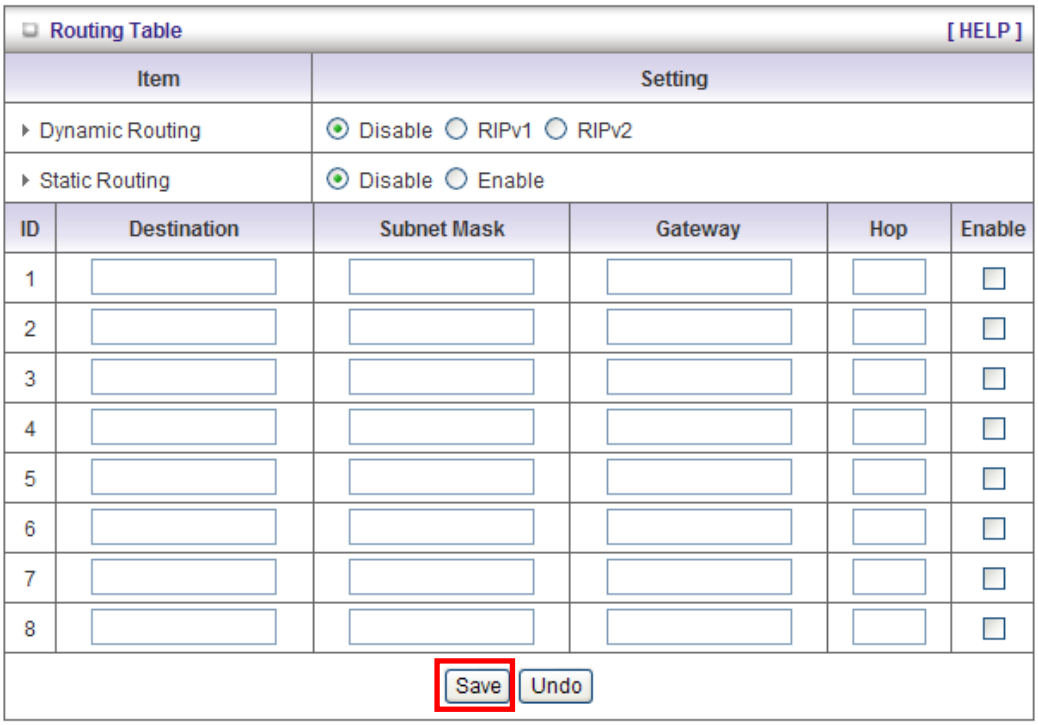

| Parameter | Description |
|---|---|
| **Enable SNMP** | You must check either **Local** or **Remote** or both to enable SNMP function. If **Local** is checked, this device will respond to requests from LAN. If **Remote** is checked, this device will respond to requests from WAN. |
| **Get Community** | Setting the community of GetRequest your device will respond to. |
| **Set Community** | Setting the community of SetRequest your device will accept. |
| **IP 1~4** | Input your SNMP Management PC's IP here. User has to configure where this device should send SNMP Trap message to. |
| **SNMP Version** | Please select proper SNMP Version that your SNMP Management software supports. |

Click **Save** after you've finished all settings.

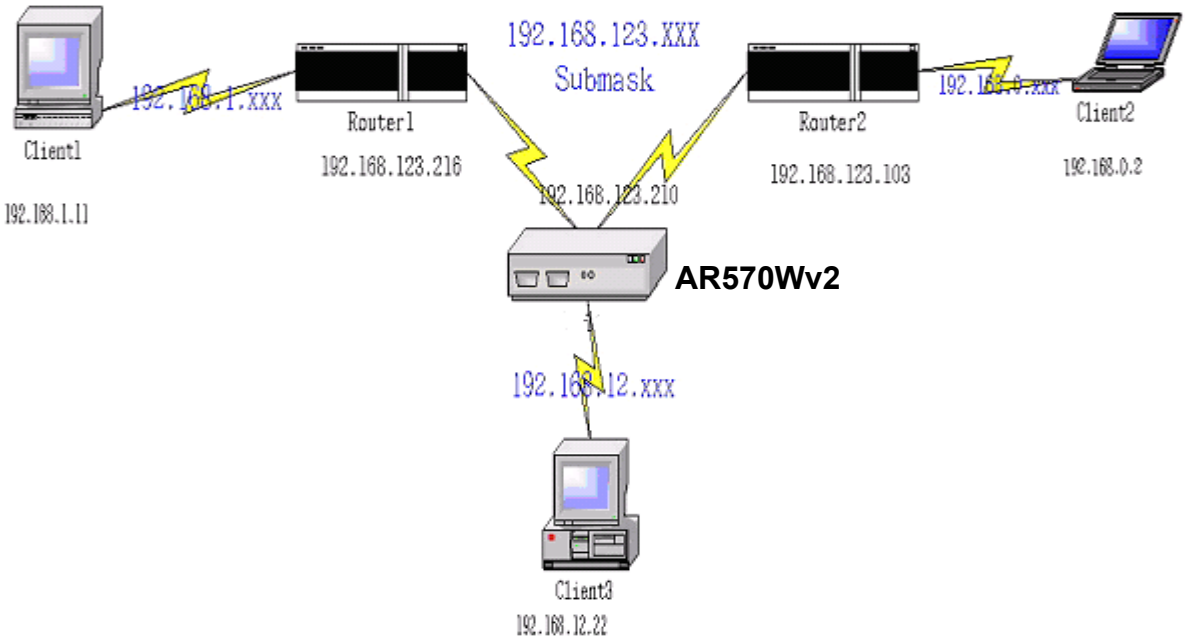
### *3.4.6 Routing*

**Routing Table** allows you to determine which physical interface address to use for outgoing IP data grams. If you have more than one router and subnet, you will need to enable routing table to allow packets to find proper routing path and allow different subnets to communicate with each other.

For static routing, you can specify up to 8 routing rules. You can enter the destination IP address, subnet mask, gateway, and hop for each routing rule, and then enable or disable the rule by checking or un-checking the Enable checkbox.



For Example:




Configuration on Static Routing

| Destination | Subnet Mask | Gateway | Hop | Enabled |
|---|---|---|---|---|
| 192.168.1.0 | 255.255.255.0 | 192.168.123.216 | 1 | √ |
| 192.168.0.0 | 255.255.255.0 | 192.168.123.103 | 1 | √ |

When Client3 wants to send an IP data gram to 192.168.0.2, it will use the above table to determine that it has to go via 192.168.123.103 (a gateway), and if it sends packets to 192.168.1.11, it will go via 192.168.123.216

| Parameter | Description |
|---|---|
| **Dynamic Routing** | Routing Information Protocol (RIP) will exchange information about destinations for computing routes throughout the network. Please select RIPv2 only if you have different subnets in your network. Otherwise, please select RIPv1 if you need this protocol. |

| | |
|---|---|
| **Static Routing** | Select **Enable** or **Disable** to enable or disable Static Routing function. |
| **Destination** | Enter a destination IP address. The Destination IP is the address of the remote network or host to which you want to assign a static route. |
| **Subnet Mask** | Enter the subnet mask. The Subnet Mask determines which portion of a Destination IP address is the network portion, and which portion is the host portion. |
| **Gateway** | Enter the gateway IP address. This is the IP address of the gateway device that allows for contact between the Router and the remote network or host. |
| **Hop** | Specify the number of next hop. |
| **Enable** | Check or uncheck **Enable** box to enable or disable the static routing rule. |

---

Click **Save** after you've finished all settings.

### *3.4.7 Schedule Rule*

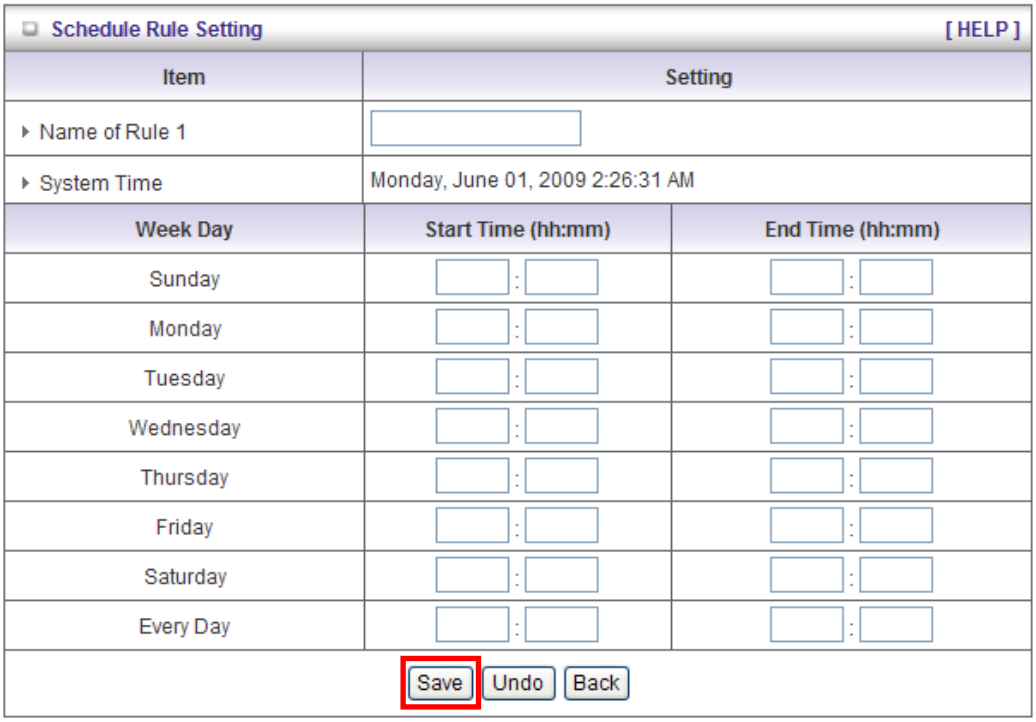
You can configure schedule rules to control the time frame of network access.

| Parameter | Description |
|---|---|
| **Schedule** | Check or uncheck **Enable** to enable or disable the schedule rule. |
| **Rule#** | Displaying rule numbers. |
| **Rule Name** | Displaying rule names that have been added to the schedule rule table. |
| **Action** | Click **Edit** to modify the schedule rule or **Delete** to remove the rule from the schedule rule table. |
| **Add New Rule** | Click **Add New Rule** to add a new rule to the schedule rule table. Please refer to *3.4.7.1* for detailed instructions. |

Click **Save** after you've finished all settings.

### *3.4.7.1 Add New Rule*

You can add a new schedule rule in this page.

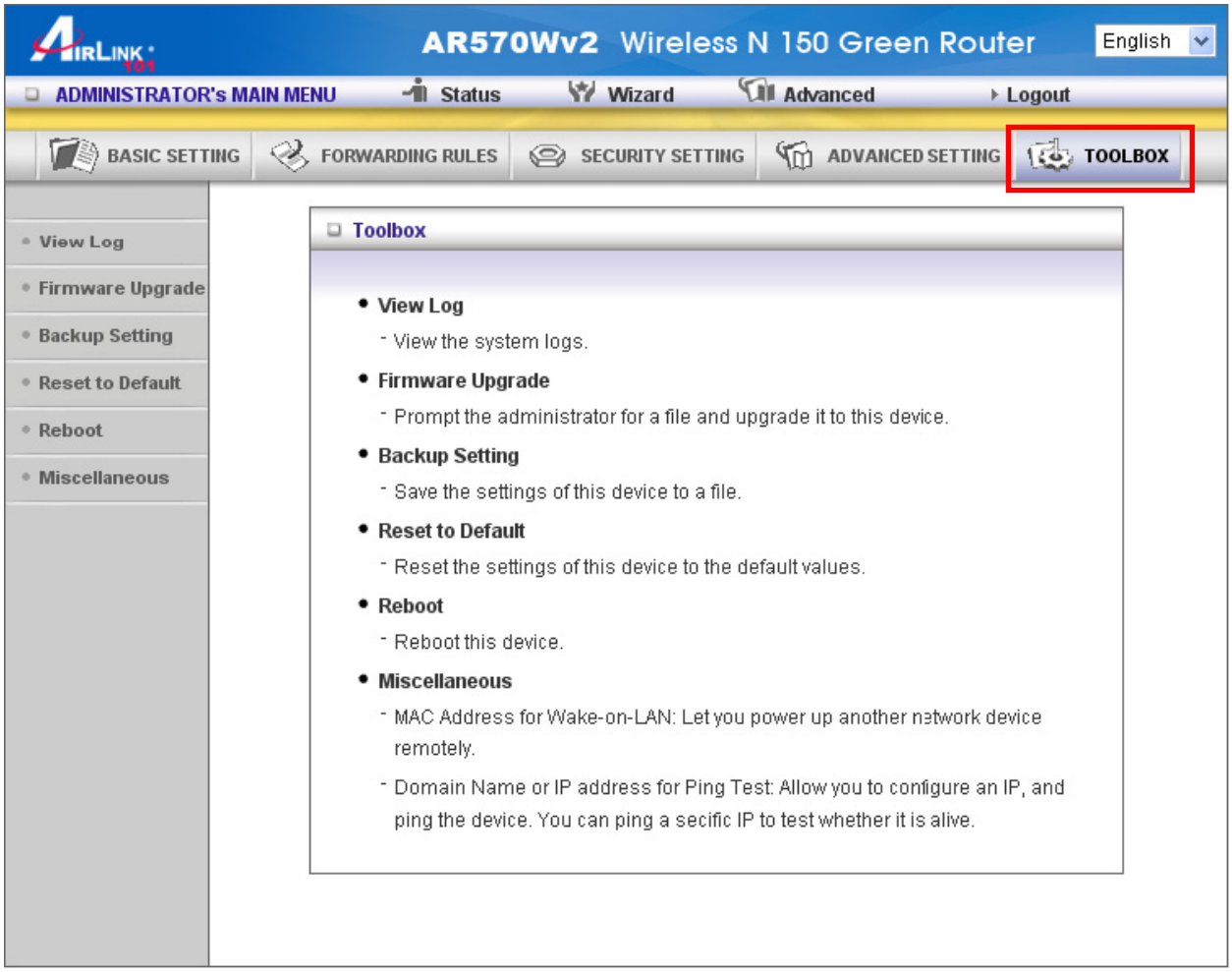



| Parameter | Description |
|---|---|
| **Name of Rule#** | Enter a name for the new rule. |
| **System Time** | Displays the current system time of the router for you to verify if this matches the date/time of where you are located. You can refer to *3.4.1* on how to modify the system time. |
| **Week Day** | You can set time schedule for each individual day or for Every Day. |
| **Start Time/End Time (hh:mm)** | Enter the start and end time of a time schedule. For example, Start Time 01:00, End Time 23:00. Please note that End Time should not be prior to Start Time. |

Click **Save** after you've finished all settings, and click **Back** to go back to Schedule Rule page.

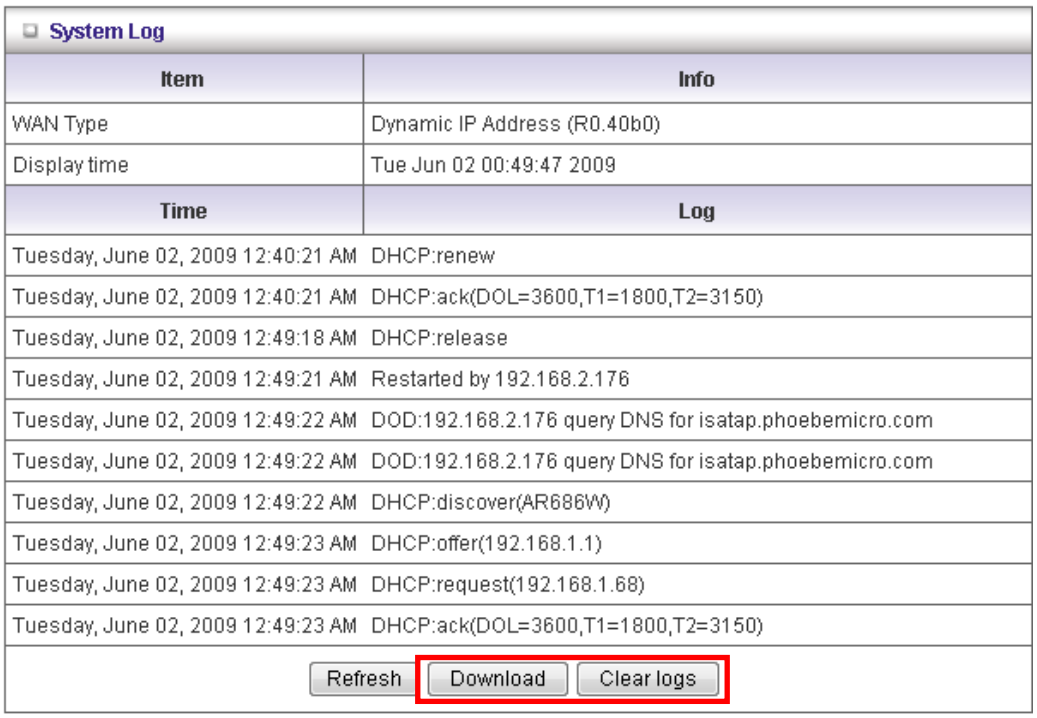
## *3.5 Toolbox*

The Toolbox page allows you to view system logs, upgrade firmware, save/reload configuration settings, reset factory default settings, reboot the router, and perform ping test.


AR570Wv2 Wireless N 150 Green Router
English
ADMINISTRATOR's MAIN MENU
Status
Wizard
Advanced
Logout
BASIC SETTING
FORWARDING RULES
SECURITY SETTING
ADVANCED SETTING
TOOLBOX
View Log
Firmware Upgrade
Backup Setting
Reset to Default
Reboot
Miscellaneous
Toolbox
View Log
- View the system logs.
Firmware Upgrade
- Prompt the administrator for a file and upgrade it to this device.
Backup Setting
- Save the settings of this device to a file.
Reset to Default
- Reset the settings of this device to the default values.
Reboot
- Reboot this device.
Miscellaneous
- MAC Address for Wake-on-LAN: Let you power up another network device remotely.
- Domain Name or IP address for Ping Test: Allow you to configure an IP, and ping the device. You can ping a secific IP to test whether it is alive.

### *3.5.1 View Log*

You can view, download, and clear the system logs stored in the router here.



System Log

| Item | Info |
|---|---|
| WAN Type | Dynamic IP Address (R0.40b0) |
| Display time | Tue Jun 02 00:49:47 2009 |

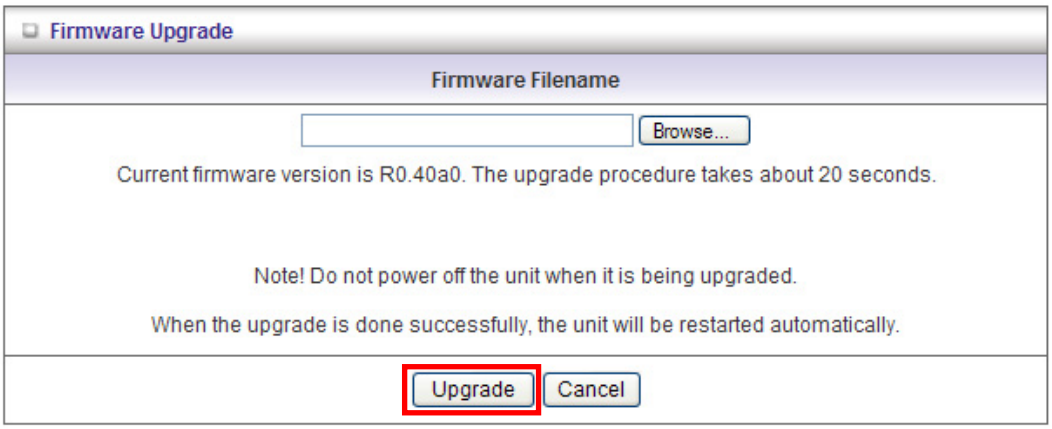
| Time | Log |
|---|---|
| Tuesday, June 02, 2009 12:40:21 AM | DHCP:renew |
| Tuesday, June 02, 2009 12:40:21 AM | DHCP:ack(DOL=3600,T1=1800,T2=3150) |
| Tuesday, June 02, 2009 12:49:18 AM | DHCP:release |
| Tuesday, June 02, 2009 12:49:21 AM | Restarted by 192.168.2.176 |
| Tuesday, June 02, 2009 12:49:22 AM | DOD:192.168.2.176 query DNS for isatap.phoebemicro.com |
| Tuesday, June 02, 2009 12:49:22 AM | DOD:192.168.2.176 query DNS for isatap.phoebemicro.com |
| Tuesday, June 02, 2009 12:49:22 AM | DHCP:discover(AR686W) |
| Tuesday, June 02, 2009 12:49:23 AM | DHCP:offer(192.168.1.1) |
| Tuesday, June 02, 2009 12:49:23 AM | DHCP:request(192.168.1.68) |
| Tuesday, June 02, 2009 12:49:23 AM | DHCP:ack(DOL=3600,T1=1800,T2=3150) |

Refresh | Download | Clear logs

### *3.5.2 Firmware Upgrade*

You can view the current firmware version of router in this page.

To upgrade the firmware for the router, you must use a computer that is wired connected to the router. You need to download the firmware from www.airlink101.com and save it to your local hard disk first. You may need to unzip it if it is a .zip file.

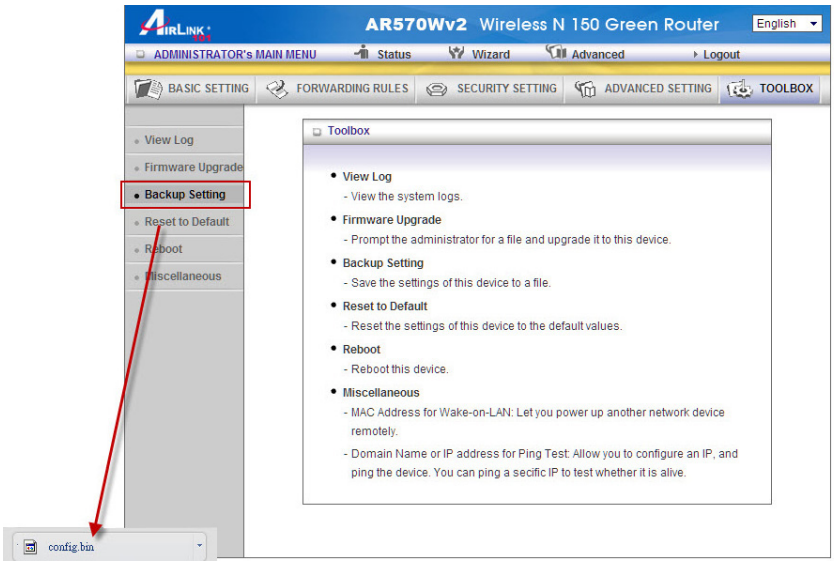

Firmware Upgrade
Firmware Filename
Browse...
Current firmware version is R0.40a0. The upgrade procedure takes about 20 seconds.
Note! Do not power off the unit when it is being upgraded.
When the upgrade is done successfully, the unit will be restarted automatically.
Upgrade
Cancel

Click **Browse** to select the firmware you just downloaded/unzipped, and then click **Upgrade** to start the upgrade process. (You may have to wait for a few minutes for the upgrade to complete).

***NOTE:*** *Never interrupt the upgrade process by closing the web browser or disconnect your computer from router. If the firmware you uploaded is corrupt, the firmware upgrade will fail, and you may contact Technical Support for help.*

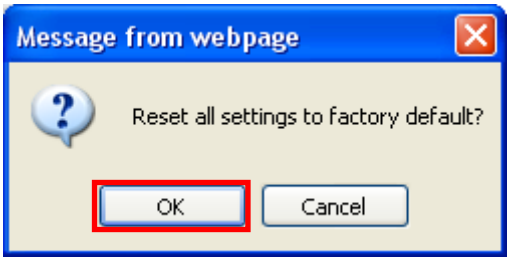
### *3.5.3 Backup Setting*

You can save the router's configuration settings to your local hard disk by clicking **Backup Setting** and save it as a .bin file. Once you need to restore the settings, please go to Firmware Upgrade page and load the .bin file you've saved.


AR570Wv2 Wireless N 150 Green Router
English
ADMINISTRATOR's MAIN MENU
Status
Wizard
Advanced
Logout
BASIC SETTING
FORWARDING RULES
SECURITY SETTING
ADVANCED SETTING
TOOLBOX
View Log
Firmware Upgrade
Backup Setting
Reset to Default
Reboot
Miscellaneous
Toolbox
View Log
- View the system logs.
Firmware Upgrade
- Prompt the administrator for a file and upgrade it to this device.
Backup Setting
- Save the settings of this device to a file.
Reset to Default
- Reset the settings of this device to the default values.
Reboot
- Reboot this device.
Miscellaneous
- MAC Address for Wake-on-LAN: Let you power up another network device remotely.
- Domain Name or IP address for Ping Test: Allow you to configure an IP, and ping the device. You can ping a secific IP to test whether it is alive.
config.bin

### *3.5.4 Reset to Default*

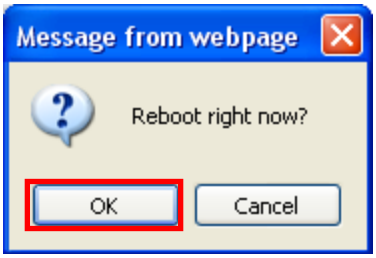
To restore the router settings to factory default, click **Reset to Default**, and you will be prompted:




Click **OK** to continue or **Cancel** to exit.

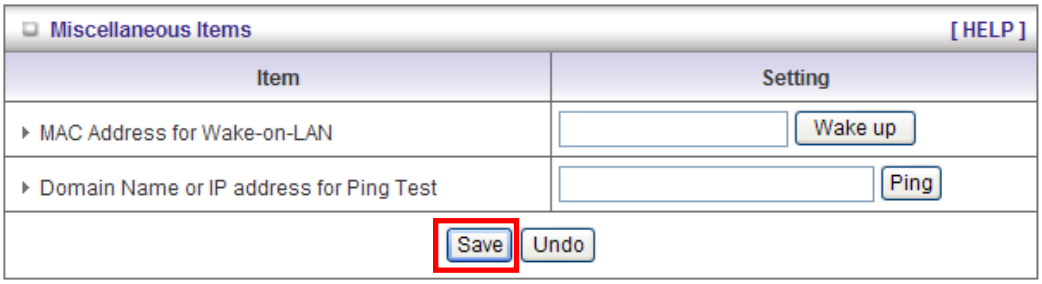
### *3.5.5 Reboot*

To reboot the router, click **Reboot**, and you will be prompted:




Click **OK** to continue or **Cancel** to exit.

### *3.5.6 Miscellaneous*

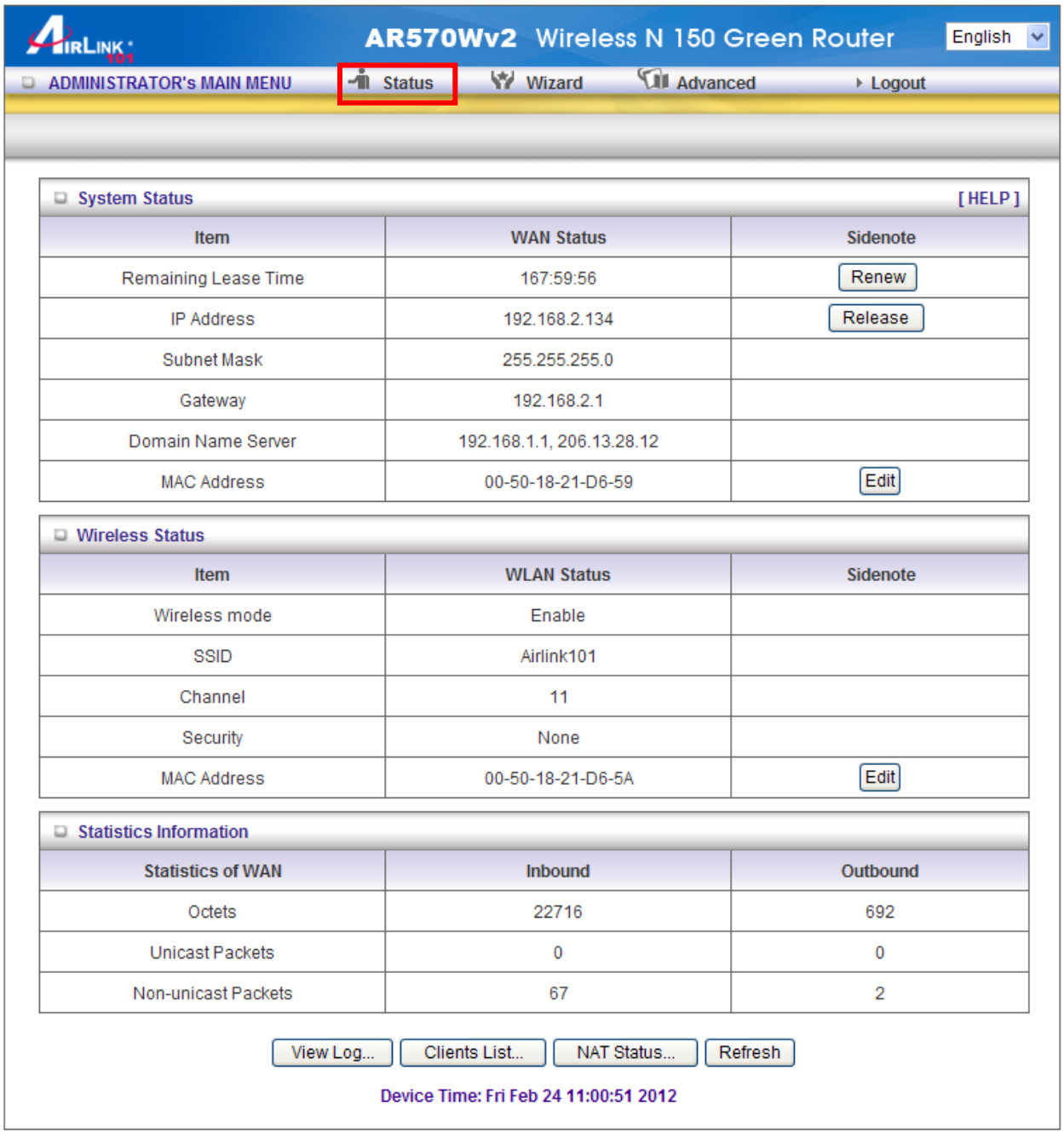



| Parameter | Description |
|---|---|
| **MAC Address for Wake-on-LAN** | Wake-on-LAN is a technology that enables you to power up a networked device remotely. In order to use this feature, the target device must be Wake-on-LAN enabled and you have to know the MAC address of this device. Enter the MAC address of the device and click **Wake Up**. The router will send wake-up frame to the target device immediately and the device can be powered up remotely. |
| **Domain Name or IP Address for Ping Test** | Enter a domain name (i.e. google.com) or IP address to perform ping test. If you can ping a remote website, it means the Internet is connected. |

Click **Save** after you've finished all settings.

# Chapter 4 Status

The Status section allows you to monitor the current status of your router. You can use the Status page to monitor: the Internet connection, Wireless, NAT status, and the statistics information of the Router.



## *4.1 System Status*

You can view the status of current Internet connection. By clicking **Renew** and **Release**, you can renew and release the WAN IP address obtained from the ISP (Internet Service Provider). And you may go back to **Primary Setup** page to edit the Internet connection settings by clicking **Edit**.

System Status [HELP]

| Item | WAN Status | Sidenote |
|---|---|---|
| Remaining Lease Time | 00:59:07 | Renew |
| IP Address | 192.168.1.72 | Release |
| Subnet Mask | 255.255.255.0 | |
| Gateway | 192.168.1.1 | |
| Domain Name Server | 192.168.1.1, 206.13.28.12 | |
| MAC Address | 00-50-18-21-D6-C7 | Edit |

## *4.2 Wireless Status*

You can view the Wireless LAN status of your router, including SSID (the name of your wireless network), Channel number, Security, and Wireless MAC address of the router. And you may go back to **Wireless Setting** page to edit wireless settings by clicking **Edit**.

Wireless Status

| Item | WLAN Status | Sidenote |
|---|---|---|
| Wireless mode | Enable | |
| SSID | Airlink101 | |
| Channel | 11 | |
| Security | None | |
| MAC Address | 00-50-18-21-D6-C8 | Edit |

## *4.3 Statistics Information*

You can view the statistics information of your router, including inbound and outbound packets.

Statistics Information

| Statistics of WAN | Inbound | Outbound |
|---|---|---|
| Octets | 53972 | 1188 |
| Unicast Packets | 8 | 5 |
| Non-unicast Packets | 213 | 5 |

## *4.4 NAT Status*

Click **NAT Status** on the bottom of the Status page to view NAT Status.

# Chapter 5 Appendix

## *5.1 Hardware Specification*

**Standards**

- IEEE 802.11b / g / n
- IEEE 802.3, 802.3u, 802.3ab

**Frequency**

- 2.4GHz

**Ports**

- 1 x 10/100Mbps WAN port
- 4 x 10/100Mbps LAN port

**Antenna type**

- One 1.8dBi un-detachable dipole antenna

**Operation Modes**

- AP
- WDS Bridge
- AP+WDS Bridge

**Security**

- WEP 64/128-bit
- WPA, WPA2, WPA-PSK, WPA2-PSK
- 802.1x
- WPA/WPA2, WPA-PSK/WPA2-PSK

**LEDs**

- Power, Status, WAN, WLAN, LAN1~4

**Interface**

- Reset
- Easy Setup Button (WPS ™ compatible)
- Wireless ON

**Advanced Features**

- NAT
  - Virtual Server
  - IPSEC/PPTP VPN Pass Through
  - DMZ Host
  - Special Application
  - Super DMZ
- SPI Firewall
  - IP/Service Filter
  - MAC Control
  - URL Blocking
  - Domain Name Filter
  - DoS Protection
  - SPI Mode

**System Requirement**

- Windows®, Mac®, or Linux® operating system
- Installed Ethernet adapter

**Power**

- DC 5V / 1A

**Dimensions**

- 156 x 110 x 22 mm (L x W x H)

**Temperature**

- Operating: 0ºC to 40ºC

**Humidity**

- Operating: 10% to 90% Non-Condensing

**Warranty**

- Limited 1-year warranty

**Certification**

- FCC, CE

# Technical Support

E-mail: support@airlink101.com

Toll Free: 1-888-746-3238

Website: www.airlink101.com

*Theoretical maximum wireless signal rate derived from IEEE standard 802.11N specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, mix of wireless products used, radio frequency interference (e.g., cordless telephones and microwaves) as well as network overhead lower actual data throughput rate. Compatibility with 802.11n devices from other manufactures is not guaranteed. Specifications are subject to change without notice. Photo of product may not reflect actual content. All products and trademarks are the property of their respective owners. Copyright ©2012 Airlink101®

**Wi-Fi® is a registered trademark and WPS™ is a trademark of the Wi-Fi alliance®